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THE BRICKBUILDER.

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ADVERTISING.

Advertisers are classified and arranged in the following order: —

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THE Architectural League of America held its third annual convention at Philadelphia, May 23, 24, and 25. The proceedings were marked by a degree of earnestness and enthusiastic interest which promises well for the possibilities of this the youngest of the architectural organizations. Enthusiasm is always contagious, and when it is coupled with such willingness to work and readiness to tackle the vital problems of the day as was manifested in Philadelphia, there can be no doubt about the League being ready to work out its mission. Ten years ago such an organization as this would have been impossible. To-day it is rapidly becoming a necessity, and the third convention has seemed to be characterized by a soberness and a serious consideration of the duties before the organization to an extent which was perhaps less in evidence in the earlier meetings. The League is in no sense a mere association of architectural draughtsmen, but is a union of earnest, determined young architects, whose manifest aim is to raise the standard of intelligent architectural and professional practice throughout the country, and we feel that our readers will be interested in the papers which were presented at the convention, some of which are found elsewhere in our columns.

However opinions may differ as to the art products of the Germans, there is no denying their theoretical excellence. There has never been a time when the best of the German work could compare favorably with the average production of Italy or France; but, on the other hand, when it comes to matters of abstract discussion, of statement of principles, of ultimate analysis of the vague and oftentimes illusory principles which lie at the bottom of all creative art, there is no race which seems so well fitted to grapple with these questions and put them in usable, helpful shape as the Germans. As archæologists they have stood unrivaled. Much of our best knowledge of Greek and Roman architecture and a large proportion of our best architectural publications are of German origin. Of recent years, however, there have been signs of a change in the point of view of the German school of architecture, and the modernizing influences, which have been so potent in England, in America, and in France, have found an echo across the Rhine. One of the foremost representatives of what might be termed the modern movement in architectural design in Germany has been Otto Wagner, who is an architect, and a professor in the Vienna Academy of Formative Arts. We begin in this number of THE BRICKBUILDER a translation of Professor Wagner's recent work on Modern Architecture. The translation is by Dr. N. Clifford Ricker, of the University of Illinois, who is certainly most thoroughly qualified to translate such a work and present it in a shape which shall have in its English guise the force and value of the original German. The architect in the busy turmoil of professional practice sometimes but dimly realizes the fierce academic battle which is waging between what is, perhaps, improperly styled the old and the new, between those whose point of view is backwards to the monuments of Greece, Rome, and the Renaissance, and those who would make all our architecture a spontaneous creation of to-day. The discussion, truly, is an academic one, for at heart the differences are far less vital than they sometimes seem, and the essentials of good architecture, whether retrospective or most thoroughly modern, are in reality quite in accord. There is little in Professor Wagner's paper which would awaken hostile criticism from a true artist, from whatever school, and there is a great deal which is put in such manner as to be of much value to every student. We doubt if all our young friends would agree with his statement, however, that the successful activity of the architect comes after his fortieth year. We believe our readers will agree with us that this translation constitutes a most valuable accession to our stock of formulated architectural ideas.

THE THIRD ANNUAL CONVENTION OF THE ARCHITECTURAL LEAGUE OF AMERICA.

DID the Philadelphia Convention sustain the enthusiasm created at Chicago? No: for it had gotten beyond merely clamoring for American ideals, and attempted to grapple with the problem itself. Enthusiasm, however, was not wanting, and many of the speakers were constantly applauded. The program was a full one, covering three days, and, in order to get through with it, a session was held on board the steamer which had been chartered for a trip to Newcastle, Del.

THURSDAY, MAY 23.

The first session began in the galleries of the Art Club, on Thursday, and was given up to routine business.

Mr. George Bispham Page welcomed the delegates on behalf of the T Square Club, and, as its president, did the honors gracefully. Mr. J. C. Llewellyn, president of the Architectural League of America, responded, and in a brief address reviewed the work of the year, and in no uncertain words stated the independent attitude of the League. He congratulated the Institute upon the improved working of the Tarsney Act, and especially in regard to the efforts of that organization in having an expert commission appointed to plan the future extension and embellishment of the city of Washington.

The formality of electing a speaker and secretary of the convention was gone through with, and Messrs. Llewellyn and Lorch, of Chicago, were elected. The reading of communications followed. Over one hundred and sixty letters and a score of telegrams were received, and only those showing a genuine interest in the work of the League were read.

The annual report of the Executive Board showed that the affairs of the League had been more easily carried on under the new constitution and by-laws than in the past. It recommended that the Exhibition Circuit Committee be in future appointed from the same club as the officers of the League.

Several architectural clubs corresponded in regard to joining the League. The Toledo Club was admitted.

The continuance of the Exhibition Circuit as a helpful means of cooperation was recommended, and special stress was put upon education and the promise of success in that field.

With the reading of the report of the Committee on Code of Ethics and Competition — Walter F. Owen, chairman (New York) — a difference of opinion enlivened the session. Mr. Harder presented a strong minority report. The committee advocated and reported the result of a joint meeting with a committee from the Institute. Mr. Harder objected to accepting part of the Institute's code, on account of its conciliatory tone, claiming that nine years ago that body came out boldly and demanded that competitions should be judged by a committee made up of a *majority* of practising architects, while now it proposes to "try to control" competitions, and recommends "that *at least one* architect" be placed on every jury. A heated discussion followed, and Mr. Lacey (Philadelphia) gave a practical illustration of the utter disregard of many business men for professional conduct. The matter was finally referred back to the committee.

Other reports followed during the adjourned meeting on board the *Sylvan Dell*. E. J. Russell (St. Louis) reported for the Committee on Current Work, and recommended clubs to affiliate themselves with kindred societies, in order to broaden their scope. A scheme whereby the individual members of one club, upon removing to another city, may become members — if properly recommended — of the club in the city to which they go, without the payment of an initiation fee, was advocated.

FRIDAY, OR UNIVERSITY DAY.

Prof. Warren P. Laird opened the second day's proceedings by welcoming the delegates to the University of Pennsylvania, and delivered an address in which he said the schools were in sympathy with the Ideals of the League, and all live problems looking to the regeneration of architecture.

The report of the Committee upon Education was then read by Prof. James M. White of the University of Illinois. Its discussion and the reading of analogous papers marked the first systematic efforts to study the opportunities and extraordinary source of architectural inspiration offered by contemporaneous life in the United States. That the results were somewhat obscure is not to be wondered at, though they demonstrated that a good deal of thinking had been done since the last convention.

The following telegram was read: —

"Greeting to the convention. I regret not to be with you. I hope that your deliberations will result in a firmer stand than ever for a rational conception and working ideal of the architectural art. Push on in the good work; I am with you in spirit.

[*Signed.*] "LOUIS H. SULLIVAN."

Professor White, of the University of Illinois, outlined the methods adopted by the Committee on Education, to endeavor to procure a consensus of opinion in regard to pure design. Replies to questions were read from many clubs and individuals. All were theoretical. The best came from the Chicago, Toronto, and Philadelphia clubs, and a letter from Howard Walker (Boston) was somewhat to the point.

If, in the future, an entire year were given up to this study alone, and if half as many questions were taken up, something more tangible and capable of immediate application might be obtained. The thin edge of the wedge has begun to penetrate; to drive it home concentration is necessary.

The subject was nevertheless ably debated, question by question, and when — "Should instruction in design be restricted to monumental problems?" came up, a lively tilt occurred. One speaker made the mistake of referring to small buildings as "hack-work," and Mr. Spencer (Chicago) championed A't for Art's Sake whether it was large or small, and carried his point, being supported by half a dozen eager speakers.

Mr. Harder then rose and brought the morning's discussion to a focus. His pregnant remarks commanded close attention.

He reviewed the results of the work of the Centralized Art School of France, and its influence at home and abroad. In foreign countries he claimed its results were

not as successful as in France, where it had grown upon local traditions and expanded to meet local needs. The pith of it all was the need of the establishment of a National School of Fine Arts in the United States.

Mr. Kelsey (Philadelphia) pursued this line of thought, but contended that first a deep-rooted purpose must be made to underlie our art, and that, until this is felt more keenly than at present, such an institution would be futile. Mr. Lorch (Chicago) thought the United States was as yet too young for such a movement, but Mr. Page (Philadelphia) pointed out that it was very seldom that a country had a chance to be caught young and in a susceptible and receptive state. He thought the movement might well begin at once. Mr. Elwell (New York) feared that a national academy would mean politics, and as there are already "art bosses," he feared that politics would be a fatal barrier to the creation of a National School of Fine Arts in which to foster the best talent.

"Mysticism and Architecture," by Claude Fayette Bragdon (Rochester), proved to be the best paper of the morning. Mr. Bragdon's easy confidence and rapid illustrations on the blackboard, as he spoke, made his remarks carry conviction. He began at the beginning, and ended nowhere. Yet his theories upon the arithmetic of beauty were unanswerable, and only had to be heard to quicken and strengthen the analytical power of every designer.

At the afternoon session Prof. Newton A. Wells (Urbana) delivered a paper upon "The Relation of Color to Form in Architectural Design," which accidentally happened to supplement Mr. Bragdon's paper, and was equally sound and instructive. In fact, it carried his theories to every-day application, and was full of useful suggestions, and pointed out many of the laws that govern all successful creative effort.

The paper was well studied and carefully balanced, in proof of which I quote his concluding paragraph: —

"While form through the logic of its structure may convince the head, color shall, through the magic of its sensuous charm, captivate the heart."

The educational debate, however, practically occupied the entire day. Francis S. Swales (Detroit) read the reply of his club to the question, "Should the study of architectural design and historic styles be based on a knowledge of pure design?" and Mr. Emil Lorch (Chicago) read a paper entitled "Some Considerations upon the Study of Pure Design." Likewise, Frederick W. Streibinger (Cleveland) took a hand in the reading of opinions on these subjects.

As has been said before, all this is in the right direction, though somewhat scattered. If some one will boil it all down and present the meat in tangible form, the third annual convention will have contributed notably to the progress of architectural thought.

In the evening an amusing little play, written for the occasion by Herbert C. Wise, was given in the rooms of the T Square Club, entitled "De Bumps and Buonarotti."

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SATURDAY, MAY 25.

The last day opened with the reading of the report of the National Committee upon Municipal Improvements. H. K. Bush-Brown (New York) had brought with him several large maps of American cities and their suburbs, and quite a library, consisting of reports from various municipal art societies, park boards, etc.

Communications were read from Boston, from the secretary of the American Park and Outdoor Art Associations; another from Springfield, Ohio, from the president of the National League of Improvement Associations. The latter expressed a hope that the League would send a delegate to the Buffalo Convention in August. Favorable action was taken upon this suggestion later in the day.

Mr. Bush-Brown then read a letter from Hon. Tom Johnson, mayor of Cleveland, in which he promised his cooperation in furthering the work proposed by the Cleveland Architectural Club, namely, the grouping of the new public buildings to be erected in that city, which was endorsed three years ago by the Architectural League of America.

Mr. Bush-Brown's report dealt largely with the commercial value of the City Beautiful in attracting strangers. It appeared that several appeals had been made for information in regard to town improvement; among others, letters were received from officials in two cities. It was pointed out that literature upon this subject has been lacking, and speakers with collections of lantern-slides are often in demand. The League endeavors to supply both.

With this end in view, Chas. Mulford Robinson (Rochester), a member of the Committee, has written a book, entitled "The Improvement of Towns and Cities" (Putnam's Sons). Its purpose is to supply laymen and city officials with a description of what has been done in the broad field of modern city making, and what is required of all communities where any civic pride exists.

Sylvester Baxter (Boston) explained the impulse back of the metropolitan system, whereby Boston and forty neighboring communities have acquired for all time adequate public recreation grounds, bathing beaches, and a good water supply.

Chas. F. Caffin (New York) made some telling criticisms in regard to the inappropriate architectural treatment of several small parks, and justly scored architects for striving after monumental effects rather than attempting to ameliorate the condition of a neighborhood. The practical art of sizing up such requirements, from a sociological standpoint, he contended was frequently missed.

Mr. Day (Philadelphia) contributed some information in regard to local endeavor along these lines, and Mr. Elwell, reinforced Mr. Caffin by describing the condition existing in Mulberry Alley, New York, and advocated public wash-houses, athletic grounds, sand-courts for children to play in; and Mr. Hynes (Toronto) explained that his club had started an agitation for improving the condition of several of the streets in his city.

Mr. Caffin spoke earnestly and showed an acute knowledge of his subject. "Art with a big A," he said, "was often a menace to many of the projects and schemes which otherwise business men would be apt to foster."

Sylvester Baxter concluded the morning session with an instructive talk, entitled "The Spanish Renaissance

in the New World." A score of large photographs, many beautifully colored, hung on the walls while he described the monastic architecture of Mexico, its brilliantly glazed domes, and gold encrusted interiors. This was the only theme of an archæological nature, and he might well have brought it up to date by calling attention to the modern architectural requirements of our Spanish colonies.

James Knox Taylor (Washington) was not present at the opening of the afternoon session, when he was scheduled to speak He, however, arrived in time to conduct the members of the convention through the new Mint Building, and while passing from room to room informally explained the present aims of the office of the Supervising Architect.

Under unfinished business, several more letters upon the study of pure design were read. One by Denman W. Ross (Brooklyn) was particularly lucid; he defined the subject by saying,—

"It means doing what the public knows, understands, wants. Design is the plane of fashion, the handmaid of commerce."

Toronto was selected as the place for the next convention. St. Louis asked for that privilege for 1903.

Several nominations were made for president, but J. C. Llewellyn (Chicago) was reelected.

The League thus enters upon another year of activity, with Chicago once more the seat of government.

The dinner given at Horticultural Hall in honor of the visitors by the T Square Club was a success.

Mr. Day made a good toastmaster.

The reelected president affirmed his strong belief in the usefulness of architectural clubs, and showed how work in a small way had led to larger responsibilities. He frowned down "brass-band" methods, and reminded his hearers that "in union there is strength."

Communications were read from Randolph Coolidge, Jr., D. H. Burnham, and the editors of the *New England Magazine* and the *Review of Reviews* — the latter, Dr. Albert Shaw, congratulated the League upon the good work it is doing by studying the larger relation of architecture to the whole life of the community.

The most stirring speech of the convention was "Intellectual Honesty in Architectural Design," by Chas. F. Caffin. He began by saying that we live in an age of universal knowledge, when it is weak not to be intellectually honest, and that, notwithstanding the absorbing interest the true architect takes in his work, there is no excuse for his being narrow. He said many good things, and had a fling at "Progress before Precedent," asking, "Will a man deny his mother and refuse all responsibility for his mother-in-law?" — which, by the way, was ably answered later in the evening, when it was admitted that that provoking maxim had been used merely for campaign purposes. He confessed that intellectual dishonesty was often the prevailing condition of our times, and regretted that we were not better masters of ourselves. He pointed out that the Greeks never knew that they were doing classic work, and asked why that word "classic" should exercise such a great influence over the profession, when we have such great opportunities all our own.

He paid a tribute to American ingenuity and the lofty building, but lost his popularity by announcing that the engineer would soon eclipse the architect.

Cass Gilbert was equal to the occasion, and his address was most impressive.

Inspired by the word "Progress," he dwelt upon the rapid changes of the day, and finally declared that the engineer was doing much to help progress, but that he would always be the servant of the architect, concluding, amid great applause: —

"Above and beyond all this is the intellect and ever-guiding hand of the architect."

Mr. Hynes offered a toast to the Cleveland Club, in whose quarters the League found its being, and promised a warm welcome to all who might attend the next reunion in Toronto.

Clarence H. Blackall (Boston) captured every one by his flattering allusion to the spirit of the work of the League. He told of a fiery youth who had written some years ago from Paris, saying that he was coming home, and did not know whether he could make a living or not, but that he heard there was room on top in Boston; "and so God help the fellows on top when he got there!" He said the young man did make his mark, and that that was what he expected of the members of the League.

Mr. Kelsey made a few remarks upon the undiminished enthusiasm of the convention, and the growing fraternal feeling among architects and draughtsmen, and, above all, their increasing loyalty to their art.

Dr. Talcott Williams (Philadelphia) gathered up the ideas of the evening and blended them into an eloquent speech, in which he urged a more perfect union of the past and present, which would insure "that ripe coming of beauty which is the dower of the future."

QUESTIONS BY COMMITTEE ON EDUCATION FOR DISCUSSION, AS CONDENSED AND AMENDED BY THE EXECUTIVE BOARD. REPLIES TO SAME.

1. (*a*) What should be expected of a graduate from an architectural school when he begins office work?
   (*b*) What should the schools leave for the offices to teach?
2. Is it advisable that the architectural student devote the time necessary to obtain a so-called classical education as a foundation for refined culture and taste, or can the same refinement be gained by studies more closely allied to architecture?
3. (*a*) How much mathematical and engineering training should an architect have?
   (*b*) Should design and construction be separated so as to train specialists in each of these lines?
4. Should schools' study of architectural design be limited to monumental problems?
5. (*a*) Should architectural design and study of historic styles follow and be based upon a knowledge of pure design?
   (*b*) How can pure design be best studied?
6. To what extent and by what methods should an architect acquire a knowledge of the art industries allied to architecture?

REPLY BY C. HOWARD WALKER.

There are two old Oriental proverbs of which I am rather fond: One is, "The strength of the pot begins in the clay." The other: "To the man with shoes all the world is covered with leather."

My answers are based somewhat on those proverbs.

1. (*a*) The object of a school is to produce architects or to train them. The training they receive as draughtsmen in a school is only an incidental part; therefore, much the most important part of a graduate's attainments is not called upon for a very considerable time after he has entered an office, and may not be called upon until he starts for himself in his profession. The expectations for attainment from the office when he enters is slight, and can be roughly stated as follows: Good draughtsmanship, *i. e.*, neatness, speed, and knowledge of how to lay out ⅛, ¼, and ¾ scale drawings. Knowledge of combinations of material and construction and how to represent them, especially how materials should be assembled, and their points of junction. Ability to use constructive formulæ from books. Knowledge of the orders of architecture, and especially a realizing sense that these orders are so organized that fundamental changes in them produce architectural disease.

(*b*) Tradition of the office. The adaptation of ways and means. Eternal vigilance with both the contractor and the client. A high standard of integrity. This last might be begun in the schools.

2. Note my first proverb. It depends upon the individual, since some men can never obtain refinement, and others cannot be prevented from obtaining it. The classical education is so closely interwoven with many of the studies allied to architecture that either leads to the other. They cannot be divorced. It is merely a question of the relation of time to be devoted to each, and that depends upon the man himself. In a general way I should say that an architectural student in the schools needs more direct teaching from instructors on the studies allied to architecture, and would depend for his classics on his knowledge of how to use books. If the question implies a knowledge of Latin and Greek, they are not necessary.

3. (*a*) Enough to prevent him from originating absurd combinations of materials, and to enable him to comprehend where strains and stresses will occur, at what points to anticipate weakness, and when to economize strength under present conditions. No matter how thoroughly trained as a civil engineer an architect may be, few, if any, have enough constant calculations to make to trust their conclusions as anything more than approximate, and it is almost a duty to have their work gone over by a specialist.

(*b*) That comes naturally. The man falls into either class by predilection. Both classes should be trained.

4. No. But the principal stress should be laid on monumental problems. Monumental design gives much that tends to restrain and better ordinary hack work, while hack work gives absolutely nothing valuable to monumental work, unless it be an accommodation of ways and means. First-rate monumental work is as heedful of conditions as is any other, but is devoid of the exaggeration of pettinesses. Teaching in hack work is merely the encouragement of common sense, which should, on general principles, be taken for granted, however lacking a large proportion of the students may be in it. I suppose this question is aimed at the teaching of small house designing, etc., and should say that very little of it was necessary in the schools. The office supplies it.

5. (*a*) I see no reason why "pure" design, by which I understand the study of proportioning construction, solids, and voids, devoid of ornament and dependent upon construction requirements and materials, should not be carried on together. Every style was naked before it was clothed, and the transitions are instructive. The student who is brought up on a knowledge of disposition of masses needs as much training in beautifying those masses as the student who has a knowledge of styles needs in adapting the styles. It is somewhat as if Sandow tried to make his own clothes, or a fop tried to make himself look like Sandow. Certainly the constructive organism is the more important, but with students, analytical, subtle study of proportions is a late achievement, not an early one, and while the first year in school may have teaching in simple construction proportions, little of value can be expected in the results, and if a knowledge of the styles and appreciation of the delights of cultured, *soigné*, accomplished work by the best men of all times is held back from the student, he is lacking stimulus, encouragement, and much of the joy of architecture. I see no reason why the two things cannot be taught together to the benefit of both.

(*b*) By comparison of problems, the determining qualities of pure design affect both the reason and the eye. The reason, inasmuch as they must appear stable and must not violate the laws of gravity, and consequently must have symmetry. The eye, as they must be agreeable to it. Each person can judge as to how far the reason is satisfied, but there will be a vast difference of opinion in regard to the usual merit. A discrimination in this respect can only be cultivated by constant comparisons which can be obtained through problems. As architecture deals with solids, I am not at all sure that models would not be of great value, for while accomplished architects comprehend, or think they do, what the effect of masses will be as indicated on plans and elevations, the student is completely at sea on the subject. It is the most difficult thing to get him to think in the third dimension.

6. This hits at the old idea that crops up now and then that an architectural student should be a competent bricklayer, should wipe plumbing joints, lay matched floors, forge joint bolts, etc., in order to know how they should be done. If he wants to, let him. The kind of a man who wants to either has a deal of time on his hands, or will never get beyond those details. Business is carried on (no matter how many lapses there may be) on the fundamental principle that good work and honesty are necessary for success — if it was not, there would be no good work — and the architect who spends a large part of his energies in making himself a searching committee for minor defects is bound to be in hot water all the time and get no better result, nor as good, as the one

who insists upon the employment of men of reputation and insists that his specifications be followed. The harping critic immediately asks, "How does he know his specifications are followed?" He knows by the training he gets in a good office, by his constant connection with good work, and by his knowledge that any firm of reputation cannot afford to do bad work. No amount of time devoted to craftsmanship of his own hands will give him any more than an occasional advantage over the student who has devoted himself to the greater things in his profession, and this last student will whip him hands down in many other things. I notice the question says "art industries." Perhaps I have misconstrued it. It mentions decoration in all materials, and if wood and stone carving, etc., are implied, the more he can learn about these the better; the schools should teach something in regard to them, and if he is an artist, he cannot keep his hands away from them, schools or no schools.

QUESTIONS 1 A AND B.

REPLY BY C. W. BRUEGGEMAN, FOR THE ST. LOUIS ARCHITECTURAL CLUB.

The two questions to which an answer is attempted in the following paper seem to hinge so much the one on the other as to make it impossible to answer the one without the other.

It is obvious that when we have outlined, as we shall try to do presently, what we expect a young graduate to be capable of on beginning office work, at the same time we must indicate what we do not expect him to be capable of until we have taught him.

It is evident that we cannot expect from a graduate any more than from any other person what he has not been taught, or more strictly what he has not learned; therefore, we are in a manner compelled to bring into the subject what the teaching of a graduate should have been during his college course. We assume as being conceded on all sides, and, therefore, as being outside the range of this discussion, that every architect should have as a foundation a liberal general education, whether he be a graduate of an architectural school or no. So we shall proceed to technical matters.

We believe it to be impossible to make courses in architectural schools, in the time that is generally devoted and may reasonably be expected to be devoted to them, comprehensive enough to turn out graduates proficient at draughting in all its branches, mechanical and artistic; at the same time proficient in the knowledge of architecture, its history; its design and the arts indissolubly connected with it; and at the same time proficient in architectural engineering, and all the practical constructional detail that is but imperfectly mastered, and is being constantly revised during years of active professional work. It is to be deducted from this that if we intend the student to know something of all these things we do not and cannot reasonably expect him to have such familiarity with them on entering an office as to go on in the practice of them with all the smoothness that is desirable in actual work.

We may assume it possible to have an architectural school with three courses embracing the three heads just previously outlined. Graduates from any one of these departments who had wisely chosen that most suited to his temperament and to his abilities might reasonably be expected to come into an architect's office able to give points all round in his special line of knowledge, to have gone beyond grounding and theory, in short, to have all the working smoothness of a practitioner, and to be a valuable man capable of earning a considerable salary, but he would not have as yet the education necessary for the making of an architect.

At the present date the graduate from an architectural school looks forward to being what is known as an "all-round" architect; therefore, we expect him not to have had a specialized course, but to have been grounded in all branches of architectural training. In this grounding it is possible to give more weight to one department than another, and this seems to be the kernel of the question before us. The question, then, is what branches may be given less time to in order that more attention may be paid to others? It seems to us that too much attention cannot be given to such departments as are not likely to be thoroughly and correctly looked after in the experience that comes to the graduate after he enters on office work.

Of architectural history the student is likely to get nothing in the office; of architectural design he will get some, and in time a great deal, but it will be given in the most unsystematic manner; we believe, therefore, that in those two branches the student should be thoroughly grounded in the school. In office designing he sees the thing done, but most usually without a reason being offered; in the school he should be taught how to discover the reason, how to apply the principles governing design so as to be able to work out for himself the general scheme, for in the office his mind is only too likely to be contracted to that small portion of the work that falls to his share.

Mechanical draughting is likely to form a large part of his immediate experience in the office, and that he will and must become proficient in, in a very short time, so that in the school no special effort need be made in that direction. Free-hand drawing, on the other hand, must be largely developed outside of office work. We expect a student from a school to be so grounded in this as to have all his natural ability well developed. Modeling, of course, should be part of his training to that end. The student who has not spent considerable time in thus educating the hand has at the same time not had his eye educated for the appreciation of form and proportion. He sees without accuracy, and too often fails to see at all. In the office there is but little time for this training, so the graduate should be expected to be proficient here on beginning office work.

In considering what should be expected of the graduate in the way of construction and constructional detail, it is necessary to be rather nice in making a statement. There are certain lines of architectural construction which have gone quite over to the specialist — the architectural engineer. The steel skeleton for the high building, the steel truss, and some of the more complicated forms of built columns and girders lie properly with him.

We still have a grip on wood trusses, girders, posts, etc., and on all forms of construction in stone and brick, and we should expect the graduate to have explored the

theory of construction and to have knowledge of the strength and possibilities of these materials as well as steel and iron in their simple constructional shapes. When it comes to the detail of construction, a very general knowledge only should be expected. The student has been trained to understand general principles, which will enable him quickly to follow the office practice in detail-making. It would be idle for an architect to expect a graduate to be educated up to his special idea of the correct form of window-box or wood gutter. So he expects him to come with his mind open in that respect.

It is impossible to give answers to the questions under consideration that cover the ground from all points of view. In the large office one thing is looked for, and in the small office something quite different. The graduate who enters an office should be expected to know something about the class of work likely to be done there. In the large office a more general knowledge should suffice; in the small office he should have given more thought to work, such as frame houses, but right here comes up a point we wish strongly to insist upon. To a great degree architects and draughtsmen are of one of two classes: the first, designers with a general knowledge of construction; the second, constructionists and practical men with a general knowledge of design.

The architectural student, early in his college course, must discover to which class he leans, and take up with most care the studies in that class. Having done so to the time of graduation, he must then look up a position where one of his class is desired. Then we believe that what should be expected of him is something very likely to be fully realized.

QUESTIONS 3 A AND B.

REPLY BY WILLIAM RAE, FOR THE TORONTO ARCHITECTURAL EIGHTEEN CLUB.

3. (*a*) An architect should have as much mathematical and engineering training as will enable him to solve, by means of formulæ derived from the experimental research of scientific experts, every problem the erection of a modern building may involve in the safe and economical use of the materials of its construction, including steel construction, heating, lighting, ventilation, and sanitation.

In considering this question we have borne in mind the difference between education and merely a knowledge of the expedients of modern practice, for these expedients vary so much in different localities, and change from time to time, so many men devising their own and ever learning fresh ones, that we think no rule may be laid down concerning them.

The use of formulæ and tables thus derived we think one of the most justifiable expedients of modern practice.

The architect's work is the harmonious association of all the crafts, which harmony can only be considered complete when the possibilities of each craft in relation to the whole is perfectly developed, and to do this a knowledge of the nature and functions of every material used is necessary.

(*b*) Design and construction should not be separated so as to train specialists in each of these lines, because a specialist is one who, in addition to the ordinary knowledge of his craft, acquires a special knowledge of one line, not one who has acquired a knowledge of one line only of the general knowledge of his craft.

Design in architecture is surely, as seen in the study of the highest design, the human figure, constructing beautifully. Certainly, the most intellectual part of the esthetic satisfaction derived from the contemplation of the human figure comes from the perception of the harmonious grace of its constructional requirements.

Could we imagine a figure built up of compression members covered with tension members and concealed beneath a coat of ornament?

What we understand by architectural design has to be based upon the use of some material. To what material shall we limit it? Stone and wood only? We do not know what the material of the future may be; there may be no stone or wood. Times change, and we must change with them.

If to build with steel construction is engineering only, then to cover this construction with an architecturally ornamental plaster is decoration only.

Though the expedients of modern practice may involve the use of specialists, we must consider it as an expedient only. The architect is the opposite of a specialist.

QUESTIONS 4, 5 A AND B.

REPLY BY JULIUS F. HARDER, FOR THE ARCHITECTURAL LEAGUE OF NEW YORK.

4. No reason can exist why general study of any art or science should be restricted to any branch or division of it, and more particularly, not to an unusual and ideal one. Nor is this the case so far as we know, anywhere, in any school. The remedy, if there be any necessary, would be, that instead of architectural design being limited to monumental problems, it is advisable to limit the school of architectural design in monumental problems in so far as it causes a sacrifice of time and attention necessary to the acquirement of information, not so pleasantly monumental, but absolutely imperative to professional practice.

5. (*a*) The "historic styles" should be studied as solutions of the problems which were presented by them in their time. It is a fact that too much stress is laid upon this matter. It is of very secondary importance. It is the most serious blunder of the schools that the "historic styles" are impressed as of primary importance. The schools are the only influence in the architectural life of to-day which seek to keep these ghosts imbued with artificial life.

Were America free from influence of foreign schools, the conviction is forced home to us, that by this time its people would have made more progress in substantial architecture. All in all, the results might not have been better, but, upon the other hand, they could not have been worse, or more enslaving and retarding in effect.

This is proven by the universal progress which is recorded in all departments in which "schools" have not existed, and consequently have not interfered. The shortcomings, however, are not those of architecture nor of archæology, nor is this an argument against schools, but the art of education itself is only in a formative state,

and but recently has itself become progressive and self-reformatory.

We would much prefer to go to the root of the whole matter and discuss the queries: Of what does architectural education consist? How can it best be imparted to the student? The root answer to both would be: Hereditary disposition on the part of the student; his physical and mental fitness; sympathetic environment. Here we have the school, the system of imparting knowledge, the methods of acquisition, the subject, the materials, and the object all combined. The school, the student, and the course are but details growing out of this general proposition. The profession of education, reaching out to inform itself as to its own functions, looking for light that it may behold the fruition of its own ends, asks itself first of all: Of what does any kind of education consist? How can the various kinds be imparted to the various individualities of students?

The problem of architectural school education applies equally, although with less force, perhaps, to other educational departments. In the sciences and in law, for instance, definite and absolute quantities and propositions are dealt with, whereas in architectural art we may only say of what it has consisted in the past, and admit with more or less reluctance that the materials, the methods, and the forms and organization of modern life make the imitation of the real art of the past but the mockery of the present. We testify to lack of knowledge and inspiration, to wrong analysis, to an education which is worse than none at all, by dogmatic insistence that the art triumphs of the past must contain the solution of the new problems of to-day. It is all very well to make demands upon the schools. The school itself must have opportunity for healthful life, its own disposition, its own environment. The hereditary disposition of the American school must be the spirit of American institutions and American inventiveness and progressiveness. Its environment must be one free from influences beyond its own, of specters, and of shadows. Its equipment must consist of an understanding that there are real, modern problems of architectural necessity to be met with real modern materials, as evolved by modern knowledge.

Finally. In order that an art school may create its own atmosphere, fulfil its purpose, contain in itself an inspiration and an incentive to work and study, all the various art branches of the colleges and universities of the country should be detached from other branches of study, and be amalgamated in one American art school, thus gaining in scale, volume, influence, and effect through concentration and through singleness of purpose.

Answering the final question, then under these conditions only "can pure design be best studied." Given now a buoyant and vigorous American student-body, under the tutelage of independent and progressive men, and who shall say what are the restrictions set upon the American architectural art of the future.

QUESTION 4.

REPLY BY MR. WATTERSON, FOR THE CLEVELAND ARCHITECTURAL CLUB.

If this question means that the student's time should be divided between constructive work and monumental problems, it is one thing, and if it means that his time should be divided between "the theory of design" and monumental problems, it is quite another. The prime object of all education is to fit the student to cope with the problems of his profession in a masterful way. The prime object of an architectural training is to fit the student to be a successful architect in all that the word implies, but it is not at all to the point that he shall become an expert engineer. At the same time it should be remembered that it is the intent of architecture to beautify structural forms. Consequently, a knowledge of structural forms cannot be ignored.

Modern construction calls for an unusual condition in design, and makes it possible for the untrained mind to do seemingly impossible things, — things which the trained mind would utilize to develop proper legitimate design. Mr. Marshall says in an article on the "Education of an Architect," which appeared in the *Record*: —

"It is evident, then, that we must teach our architectural student most emphatically to work in structural forms, but it seems to me equally true that in the education of the architect we should follow the developments of the past, *i. e.*, that we should endeavor to teach the youth the principles of beauty and how to apply them to structural forms which are already settled and commonplace to the race as a race of builders. It were well, as I have said before, to make the education of the architect as wide as possible in every direction, for the broader the man, the more effective will be his work so long as his dominant artistic impulse is left full play; but there seems no reason to insist upon the attainment of knowledge of highly technical engineering methods which are useful only in the solution of new structural problems, although it would, of course, be desirable, if possible, for the architect to gain the acquaintance of such methods. Of course, he should know thoroughly the underlying principles of engineering method, the way in which the strength of materials and foundation values are developed, and the most practical forms of construction in stone and brick, wood and iron, especial attention being given to the nature of arch thrusts, and he should be able to work out the less complicated problems in each case, but beyond this all that he needs to know are the general forms within which he may work economically."

Now, on the other hand, it is a choice between monumental problems or the study of the "theory of design," and it would seem that, inferentially, the training in monumental work would so familiarize the mind of the student with the principles of good design that he could easily meet the requirements of any other composition.

It has been said that "the student is fortunate if his school training gives him even a beginning of a sense of appreciation of what constitutes good taste." It is essential that the architect, to do good work, must be thoroughly grounded in the rudiments of design, and the student should be taught his design as the child is taught his alphabet. He should learn to use his moldings, his surfaces, and his openings as a child is taught to use his letters in the formation of words, and words in the construction of sentences. If monumental problems embrace a greater number of the principles of design than

other problems which are given to the student, then instruction should be limited to the monumental, but it would seem that the mind which had been taught to skilfully handle a composition which embodied the heavier principles might easily express itself in any style, the principles being the same, the difference being in the manner of expression.

It is the duty of instruction to place high value upon the spirit of design, and it is for those who have in hand the education of the younger generation of architects to determine what method is best. The student should be taught to think inductively, that his individuality may be expressed in his work. Just the best method to accomplish this end depends largely upon the aptitude of the student, but it would seem that the mind trained upon monumental work and filled with the traditions of the best historic work would put into his problems an interpretation which generally would be correct.

Naturally, from the diversity of human ability, all students trained under the latter system may not become successful practitioners or draughtsmen, but with proper administration in the hands of capable instructors, this system should produce many successes and few failures.

QUESTIONS 2, 5 A AND B.

REPLY BY GEORGE BISPHAM PAGE, FOR THE T SQUARE CLUB.

2. Assuming that it is meant by a "classical education" the regular Arts Course of the universities, it is advisable, because a classical education forms a good foundation to build upon in after life; advisable, however, only if a post-graduate course in some recognized school of architecture is to follow. The refined culture and taste so gained can hardly be obtained by other means.

5. (*a*) Pure design being the logical solution of a given problem, it must follow that the architectural styles of the past are of their day and generation only. They may be studied as stepping-stones to the development of modern architecture, though no contemporaneous problem can be solved without meeting modern requirements in a modern way.

(*b*) Pure design can best be studied by an unbiased consideration of all the diverse conditions entering into a problem; thus, the dominant conditions will then govern the character and expression of the design.

QUESTIONS 1 A AND B.

REPLY BY J. W. CASE, FOR DETROIT ARCHITECTURAL CLUB.

On entering an office after pursuing a course of study in an architectural school, the student should be prepared to execute simple office work under the direction of an older man, so that he will be of immediate use and value in an architect's office. Besides this, he should understand all the general principles of all branches of an architect's practice, so that he may quickly learn the office methods of applying this fundamental knowledge.

The school should teach general principles; the office should teach the technical application of these general principles.

In a four years' course of architecture there can be no time for specialties. The time is all too short to cover the general knowledge required in all the different branches of an architect's practice.

The student should not find that an excessive amount of his school time has been taken up in studying monumental problems, whereas in his entire future practice he may never have a monumental problem to solve.

He should not find that an excessive amount of his time has been occupied by historical research, taking in consideration those principles which would enable him to design architectural forms suited to his own surroundings, and making of him an archæologist, capable of reproducing historical forms, but unable to design new forms suited to his own atmosphere, material, and indigenous conditions.

He should not find that an excessive amount of his time has been occupied in perfecting methods of making pictures, which his defective knowledge of constructional forms renders him incapable of constructing.

He should not find that he has given so much time to the study of applied mechanics and its application to architectural engineering that he is deficient in artistic qualities.

When a student enters an office he very often finds that his study has been biased by one or another of the above points of view, and also that he has not made an adequate study of the arts and crafts, or, in other words, that he does not know anything about the artistic uses of building materials.

The superior knowledge of the artistic possibilities of building materials marks the greatest epochs in architectural history. It is the basic principle, the vital and essential quality of Grecian and Gothic architecture.

The artistic chisel, feeling the firm and homogeneous Pentelic marble, brought forth those subtle curving forms and refinement of proportions which constitute the greatness of Grecian architecture.

The character of building material forced the architect to invent the arch, the vault, and buttress, and atmospheric conditions produced Gothic masses silhouetted against the sky.

The Japanese carver studies the grain of his wood, and from its twistings evolves the creatures of his imagination.

What does the American architect know of the artistic possibilities of building material, or wish to know?

The student who is expected to understand all the fundamental principles of an architect's future practice will study the subject from three general points of view. As an artist, he will study drawing in charcoal, pencil, pen, brush with color, modeling in clay, terra-cotta, cement, metal castings, carving in stone and wood. Designing, both applied color and form, and imbued colored material, stained glass, wrought iron, etc. Ornament, historical and creative, based on native flora and fauna.

Architectural design, not only monumental problems, but artistic solutions of practical problems.

History of art, architecture, sculpture, and painting as the development of principles.

Building materials, development of their artistic possibilities.

As a construction, the student will understand the

general principles of building materials; of wood, masonry, and steel constructions and their superintendence.

Laboratory work should supplement the abstract consideration of building materials. The student should pursue courses of shop-work in carpentry, masonry, metal, and spend considerable time in watching building operations.

It might be advised, before allowing an architect to practise, to require him to pass a certain amount of time as clerk of works; the gain to himself, to his client, and to the future of American architecture would be enormous.

As a business man, the student should study specifications, contracts, and civil law relating to building contracts and operation.

The school should teach all the fundamental principles which will control the architect in his practice.

The office should teach the practical methods of applying these fundamental principles.

The time of the student should not be taken up in perfecting the practical application of any of these studies of rendering; too much time is taken up in learning to make perfectly graded washes.

Beautifully rendered drawings are an important factor in competitions, but are properly the work of a specialist.

The study of mental instructions should embody principles and methods, and leave abstruse mathematical calculation to the specialist. The application of applied mechanics is the work of a specialist. Post-graduate courses should be arranged to meet the requirements of specialists. The school must form and direct the artistic tendencies of the student, and to that end the study of classical problems in architectural design is advisable, but the study of design should not be restricted to ideal, classic, or monumental subjects.

A majority, or more, of the students of architectural schools will devote their entire efforts in their practice to solving the requirements of ordinary commercial and domestic problems, and will never have an opportunity to design a monumental structure; students, therefore, should be instructed in the fundamental principles of the problems on which their entire future life will be passed.

They should understand the desirable arrangements and the conditions to be avoided in designing houses, commercial structures, churches, municipal buildings, schools, theaters, libraries, etc.

Their instruction should show them how to satisfy the practical conditions of ordinary problems in an esthetic manner.

How can the solution of these practical problems be left for the office to teach, for it is generally conceded that the office solution of those problems is unsatisfactory.

For this end, the student must know building materials, how to use them practically, and especially how to develop their esthetic possibilities. He should understand and sympathize with the arts and crafts, and receive instruction in modeling, carving, stained glass, wrought iron, etc., not to the extent of manual dexterity, but to gain a knowledge of esthetic possibilities in using materials.

The most essential requirement of an architectural education is cultivation of the artistic creative faculty.

The creative faculty, the art instinct, the artistic imagination, is the most valuable and most essential quality that the architect can have or acquire: it is the essential element in all great art. To awaken and develop this faculty is the greatest opportunity of the architectural school.

"SHOULD THE STUDY OF ARCHITECTURAL DESIGN AND THE HISTORIC STYLES FOLLOW AND BE BASED UPON A KNOWLEDGE OF PURE DESIGN?"

BY ROBERT C. SPENCER, JR.

THE question before us is one which vitally concerns architect, student, and teacher alike. Not altogether clear or exact, perhaps, in its wording, but clear enough, I think, to us for all the purposes of discussion. Of "pure design" or abstract design we cannot readily conceive apart from some medium of expression as a means, or apart from beauty as end to be attained.

But with certain universal principles of design we are all more or less familiar, and we can readily conceive of the existence of others, yet unknown, but vaguely felt by us apart from any concrete application through any specific medium.

Many of us are also familiar with these abstract exercises in design based on these principles which may be practised in various media, and which are employed chiefly as yet by certain teachers and masters in the field of decorative art to whom design inspired by these principles and ideas without reference to any special use is, for lack of a better name, known as "pure design."

It is, therefore, to these principles and their study in relation, first, to beautiful design in general, then to the design of beautiful buildings in particular, that our discussion to-day must be confined if we would be of some direct helpful service to the cause of architectural education. I am not attempting here to show, and I do not believe, that a general knowledge of principles, such as one man can impart to another, or which can be learned by cold-blooded routine study, will enable an architect to employ them in the reasoning department of his mental laboratory with any certainty of creating beautiful buildings.

In the case of an individual without that inborn creative instinct which seeks expression in line, form, color, and material, the best education, the most thorough intellectual knowledge of abstract principles, coupled with the highest reasoning powers, will not alone enable him to do what the untaught savage, imbued with the beauty-creating spirit, does apparently by intuition through the unconscious and intuitive guidance of imagination by their eternal laws. There is a certain intuitive power in some minds which might be called the electro-motive force of the inventive and creative faculties. Whether this force can be intensified and developed we scarcely know. But we have faith and hope that while youth lasts it can be fanned into a divine flame. We do know, however, that in many minds this force is there, though not manifest, simply waiting to

flash forth, as the arc of dazzling light leaps between the carbon points when the switch is thrown and the subtle but powerful current is liberated. How best to free this force, how to guide it, and how to supply its deficiency by certain knowledge of broad principles and established truths is the real problem which confronts the parents and teachers of our future architects.

The parents first. The schools alone cannot make architects, nor can the kindergartens, which so beautifully lead into the schools, more than begin the work. The parent must realize fully his responsibility to the child for its right guidance, physically, mentally, and spiritually, from the cradle. Example and precept at home are more than schools and formulæ. And since one of man's highest and purest delights is in the expression of the spirit through creative effort, the education of every child should look from the beginning to the evolution of an individual, intelligent, and creative personality, gifted with a reasonable mastery of at least one medium of expression.

Whether that one medium of expression is to be music, literature, painting, sculpture, or architecture will be best determined by the free choice and natural bent of the individual. Our architectural schools will then no longer be hampered by sons who have been *sent*. Their places will be more than filled by those who *come*. Among the many who now crowd these schools but few are led thither by a genuine enthusiasm for art. The heads of the schools, therefore, protest that their function, in large measure, is to so drill the average student by means of the "Orders," the literal following of historical examples, and by the suppression of any undue evidences of individuality, that he may become a sane (?) and safe (?) member of an eminently respectable profession.

But, in spite of this protest, I know that the schools are not satisfied with a sane, safe, and eminently respectable product. They would fain be the nurseries of great masters, and each would, if it could, be the Alma Mater of the men whose works are to be landmarks in the unwritten history of architecture in America. There is a *feeling* of disquiet and unrest abroad, as well as a *spirit* of disquiet and unrest. We are looking and groping for a knowledge of principles and methods which, when intelligently and earnestly applied by talent to the solution of practical problems in terms of beauty, shall be found as universally sound and vital as are the special applications of these principles and methods to planning as taught by the world's best schools to-day. The basic principles of design apply to *all* art and to *all* of architecture. They can be taught to a child or to an unlettered savage, for they are elemental — they are beautifully simple. It is only in their applications that they appear diverse and assume an apparent and almost paradoxical complexity that bewilders and misleads and makes us doubt in our ignorance or blindness. The artists of all ages have been guided by them, consciously or unconsciously, in their broader aspects. The children of the public schools almost unerringly choose from the crude efforts of their fellows penned upon the walls, the *best*, in unconscious, inevitable, natural obedience to Nature's laws. For these laws are, after all, natural laws, since they spring from the same infinite Intelligence which created the lily and the mountain crag, and made to multiply upon this little earth millions of marvelous human eyes to see in them simplicity, unity, strength, repose, harmony, order, rhythm, purpose, and, through the more wonderful eye of the awakened spirit, to see the living and tangible expression of infinite Power and infinite Intelligence and infinite Spirit.

Working through the inspired intelligence of man, as through a marvelous instrument, this same infinite Spirit manifests itself through toil and struggle in the works of men which they and their fellows have deemed beautiful. How are we as instruments to become responsive to the touch of the Master, producing sweet tones and harmonies, not jarring noise and hopeless discord?

Are we to do this by denying these laws and their existence? By applying them here and casting them stubbornly aside there? By declaring them to be so contradictory as to annul each other? Putting aside any question of faith in or reverence for an infinite Intelligence, disregarding even the beautiful and unerring working of natural law throughout the universe, can we close our eyes and ears to nature and to the precepts and discoveries of the students of beauty in nature in this scientific age, which is preeminently an "Age of Reason"?

Do we fear that the temple dedicated to Art is about to be profaned by the steel-shod foot of Science? Why, then, this doubting — this looking askance — this timid shrinking at the thought of Beauty, understood and approached, not through Science, but in the light of the knowledge which Science by her sane and searching methods has already given, and of which she stands ready to give more to those who earnestly seek?

These are generalities — but generalities must precede particulars. The cloud must precede the infinitude if rain drops.

I have already mentioned some of the most universal principles underlying the arts. With just a little sound knowledge of these principles, and just a little appreciation of the possibilities of pure design, the student under right guidance is prepared to study architectural design and the history of architecture, as well as the specialized study of material and structure, bringing to bear upon each of these the test of universal laws in so far as he has already been able to grasp them, and, guided by wise and stimulating instruction, learning of the application of these principles as exemplified in the great historic monuments and of their misuse as exemplified in the decadent periods of our art. In short, the study of architectural history may be made simply one phase of the study of those principles upon which all good architecture is based, be it the architecture of Egypt or the architecture of America in the twentieth century. As for "the Orders," instead of making them a fetish to be bowed down to and blindly worshiped as having some mysterious intrinsic qualities of proportion which make them to a degree applicable and bodily transferable to any building, they should be honestly given their due place in the study of architectural history and art, and no more. If they are beautiful and universally applicable to anything from a circular Roman temple to the base of a twenty-story modern office building, depend upon it, the young man trained in pure design will appreciate these facts, regardless of time-honored tradition and

without further teaching; to him "the Orders" will speak for themselves. But he will consider them first but as details of *buildings*, which are themselves of far more significance than their structural and decorative parts. He will understand that an order cannot be studied intelligently apart from the structure or type of structure to which it originally belonged. To him, column, entablature, and pediment will be primarily nothing more than simple structural elements, to be cast aside as useless where the structural requirements can better be met by other means.

He will build naturally, be it on paper, in the solid clay, or in materials. He will build simply, honestly, and reasonably. Obedient to the laws of Unity and Harmony, his decorative details will be as natural an outgrowth of Structure and of Use as the flower springing lightly from the stem is an outgrowth of the plant, and so in sympathy with the whole that the melody of simple, beautiful structure is made rich harmony. He will not be content to remain in practical ignorance of the modern materials, tools, and processes which should be his media of expression. On the contrary, once acquainted with the possibilities opened up to him by the study of pure design, he will not rest until he knows thoroughly, by intimate and long study and use, the material side of his art. The failures and successes which others have made in the past in the use of materials and tools will be studied by him in the light of the great fundamental laws.

He will not abuse materials nor unduly force them. He will appreciate the natural charm of simple, beautiful surfaces, colors, and textures, and let them alone. He will know how to seize and put to his own use the inimitable effects of nature which we call "accidentals."

All this, and more, if he be taught *Principles* first, last, and all the time. And, once a beginning has been made, he may in large measure be his own teacher, seeking for evidence of The Law everywhere in Nature, in Art, and in Life, and making The Law always the final test of his work. I believe that we are fast coming to a parting of the ways. There is a vast army of children in the schools, who, as the men and women of to-morrow, will demand something more than the dry husks of an imitative or interpretative architecture. They will see the radical difference between the *artisan*-architect, who skilfully reproduces the works of other periods, and the *artist*, who creates for his own time, for his own people — for himself. The common-school education of our cities, with kindergarten training, drawing and nature-study in the lower grades, and manual training and more drawing in the higher, is developing in our children an appreciation of beauty and developing their powers of independent thought and analysis. Let us hope that the artists who spring from their ranks may be trained as to meet the real needs of their times. The study of pure design, as a means of strengthening creative power, of developing an appreciation and understanding of the principles of line, form, and color, of light and shade, rhythm, balance, and organization, should be made an important and primary feature of every school of architecture. Of its value to the individual I have the most direct personal knowledge.

In closing, and before we enter together upon a discussion of this vital question, I urge you all from the bottom of my heart to seek with us, in a broad, optimistic, hopeful, and scientific spirit — the spirit of the true artist — for a better knowledge and appreciation of these laws which govern all successful creative effort. You cannot deny their existence or their power.

"PROGRESS."

BY CASS GILBERT.

I AM very much gratified to be called before the Architectural League of America to address you upon any topic, but I am particularly flattered that I am called upon to adress you upon the topic of "Progress." It is a topic that appeals to every man of intellectual integrity or intellectual honesty, and especially so to the American of to-day. I cannot hope to express to you in eloquent terms the thoughts that rise, perhaps, in the minds of every man present here to-night — the thoughts that may be inspired by the word "progress." It seems to me that if there is one word more than any other to-day that inspires American intellectual life, American energy, and American achievements in every direction, it is the word, or the thought expressed by the word, "progress." Progress in our political institutions, progress in our mechanical inventions, progress in our intellectual life, progress in our spiritual movement forward in the world, and progress in the arts — which is simply the expression of all the others combined and the record of events from day to day as they go forward.

I contend that the architects, the artists, the painters, and sculptors in all the various departments of art-life have borne their share well in the field that is represented by the word "progress." I want to express my appreciation of the very admirable and instructive statements that have been made by Mr. Caffin. It seems to me that his point of view is excellent. He speaks, however, from the standpoint of the layman — the layman who is especially interested in art. There is no class of men from whom the professional architect can gain more instructive and valuable knowledge than he can from just that sort of man, — one who thinks about the subject in which the architect, as a professional, is interested, who thinks so clearly and puts his thoughts so clearly in writing as does Mr. Caffin. Nevertheless, I think that Mr. Caffin made some statement to the effect that we are "up against" the problem as to whether we were going to be decorators of interiors or exteriors of buildings, and assumed apparently that we were about to step aside and admit the engineer to be the master builder and we to be the decorators of his work. I want to controvert that statement! Are you, gentlemen, ready to admit such a proposition? I think not. Mr. Caffin contradicts himself when he says that the office buildings in Chicago are demonstrations of intellectual honesty. By whom were they built? By the engineers? They have condemned them as very faulty in their construction. They might let him pass by the architects, and say that they did not create the conditions that made such structures necessary. We will then have to go to the real

estate men and capitalists who did. We architects want our share of credit and believe that we deserve it.

I look back into the history of architecture, and it seems to me that I see that the great engineering achievements in the direction of buildings have been by the architects. My engineer told me the other day that scientifically the dome of St. Peter's in Rome was impossible; yet I know it has stood several hundred years, to the admiration of the world. The engineers of Florence told Brunelleschi that he could not build. He was a modeler in clay, a sculptor, a man who competed for the bronze doors and gates of the Baptistery of Florence; then went to Rome and measured the old buildings and studied the same as I did, as we all have gone around the world and tried to learn the works of the masters. He started with the instinct of taste, with the desire to develop the things he saw around him to things more beautiful. He found the necessity, and he met that necessity. We do the same thing.

Twenty years ago there were no sky-scrapers; the problem did not exist. We have found the problem, and, to a certain extent, at least, have met it. I claim it is the highest evidence of progress of American architecture, and the highest title we have to claim for ourselves the right of existence as a profession, that we have met a thoroughly modern problem in a thoroughly modern way, and practically in ten years, as you see it. Will you tell us that we are not engineers? I say we are something better than engineers, and they shall act but as the servants of the architect who tells and directs them what to do, and they do it; intelligently, but only under his bidding and his control, and it must be so. It must be so, and why? The architect and the engineer may work together. The architect deals with two elements of human life, — the material and the spiritual; the engineer deals with but one, — the material. Which is the greater of the two? You know and I: it is the spiritual element of life and the spiritual element of art. Those of us who have been in practice a few years refer back to the subject of progress and remember the time when our drawings were made in a very simple way and reproduced in a very simple way; the needs were simple and the requirements few. Things have developed since then. We have grown all along the line. The requirements upon the architect now are multifarious. He must meet them, and meet them perhaps in a new way. He calls to his aid the various arts and the various sciences; they all contribute. Far be it from me to detract or take one single jot or tittle of the value of the credit that belongs to the noble allied professions that so admirably aid in forwarding our own work. But, gentlemen, I tell you I am glad to stand as the champion, perhaps for the moment, of the idea that architecture, more than any other profession, has been in the very forefront in the line of progress, — progress in the sciences and in the arts of to-day. It is a very interesting study, this thought of progress in the arts. It is a trite thought, perhaps, to go back to the time when the first man lay a few boughs across from one stick to another and formed a shelter for himself, and enclosed it, little by little — finally he built a house; or he who took the log and hollowed it out, dug the log out, and got inside and paddled, and so on until we come to the steamship — all that is progress. Any man who has been about the United States very much has seen something of progress. A few years ago I saw men who had been more or less in the West and seen the time when the broad prairies had scarcely a house upon them, when there was scarcely a tree, when there was scarcely a road, when there was practically nothing; and yet within our short lifetime those prairies have been developed. To-day one finds beautiful groves of trees, well-made roads, well-built houses, and electric communications of all kinds, — developments of the arts and sciences; a contribution of the young men coming out of those homes and entering into the walks of life in all departments, very largely into art. The prairie has been made to blossom like the rose, and the earth has covered herself in the presence of man with a mantle of green and gold. We have seen progress enough in our country, and it seems to me that we can reflect upon it, not in a boastful spirit, but in a spirit of thankfulness for the power that has given it to us, the power that has condescended to give us an opportunity. We have seen the development of our country in its sciences and its arts, in its national life, and it is peculiarly gratifying to us that it is so.

I feel that the plea of the previous speaker made for intellectual honesty is one of the fundamental things we should bear in mind in relation to progress. It seems to me that the most progress is made by exactly the thing for which he pleads. For if a man simply takes a problem given him and solves it in the way that comes easiest, the way in which he is most accustomed to work, he makes but little progress. If he is an observant man, he finds new conditions in each new thing. He follows those new conditions. He looks them plainly and squarely in the face, and the result is something new. That is progress. And yet progress is not a novelty; it is a development. Progress does not mean, from my standpoint, gentlemen, the throwing away of that which was before, but the development of that which was before. There are two kinds of progress, — a progress forward and a progress backward. There is only one animal that I know of that goes equally well one way or the other, and that is the crawfish, and we do not admire him. We must go forward or backward. We are happy in living in a day when things go forward, and the Architectural League of America is one of the things of the country which is trending in that forward direction. Speaking of the Architectural League, I see gentlemen here to-night who were members of the first Architectural League in this country. In 1881 half a dozen fellows got together, and with them we made an Architectural League. We didn't call it by that name, but the result was the Architectural League of New York. From that has grown up this whole system of clubs and leagues, and, finally, this organization and society. It seems to me that is progress. In those days we were just starting in; we thought we were. We knew we were, in a sense, as the poet says: —

" . . . dreamers, dreaming greatly
In the man-stifled town, —
And we yearned beyond the sky line where strange roads go down:
Came the whisper, came the vision, came the power with the need,
Till the soul that was not man's soul was lent to us to lead."

Modern Architecture.

BY PROF. OTTO WAGNER.

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THE ARCHITECT.

THE architect from his happy combination of the ideal and the real should be esteemed as the best of modern mankind. But, unfortunately, he himself alone feels the truth of this expression, while his contemporaries stand aside with reserve. I must join in his praise at the risk of being accused of delusions.

The training of the architect, extending throughout his life, the responsibility connected with his creations, the great difficulties opposing the erection of his works, the indolence and the preposterous views of the multitude concerning architecture, an unfortunately too common envy, and the diversity of opinions among men of his profession almost invariably cover with thorns the path of his life, so that he too frequently looks longingly on the younger of the sister arts, which usually offers a life strewn with roses offered by mankind. Praise and criticism make the career of the artist fruitful, just as sun and rain do the earth, but they seldom appear in the architectural sky, where only the eternal gray of practice and the dismal darkness of public indifference veil every clear and cheerful prospect.

The architect can never count upon immediate success, or on the ideal rewards. Recognition sometimes comes to him after perhaps years of work, if under numerous difficulties he has completed a building; but the acme of his artistic ecstasy and the joy of creation occurs in the moment when he sketches out one of his ideas according to correct ground principles, which are neither evident nor understood by every one. Therefore, the architect must seek in his own satisfaction the chief part of his reward. But he must with constant love and persistence keep his work ever in hand, and neither wander nor tire, even if, as is the rule, his pecuniary recompense is but moderate, and if the world is pleased to give as much to a vocalist for an hour of song, as Gottfried Semper, with all his economy, saved during his entire life.

Among all formative arts, architecture alone creates and produces, it is alone prepared to originate forms that appear beautiful to mankind, but whose models are not found in nature. Even if these forms have their germs in natural objects, and their origin in building materials, the result lies so distant from the origin that they must be accepted as entirely novel objects.

Therefore, it cannot be surprising to learn *that in architecture is to be seen the highest expression of human power, striving after the divine.* There is proof of this in the incomprehensible and overpowering influence exerted on mankind by works of architecture, which plainly demands consideration. Hence, architecture must be esteemed to be the mightiest of all arts.

All artistic ability is composed of two qualities of the man: Of the innate power (creative ability) and the acquired knowledge (science). The more clearly these two possessions appear and balance each other, the greater will be the value of the art work produced. It is scarcely necessary to give an example, yet to make it clearer, it may be stated that Hans Makart possessed more innate power that acquired knowledge, while for Gottfried Semper, the reverse is plainly true. On account of the vast quantity of material to be studied, the condition of Semper will be most common among architects. Among painters and sculptors, results appear without any apparent scientific knowledge, but this is manifestly impossible for architects.

This creative power chiefly consists of imagination, taste, and manual skill, just those qualities so essential in the profession of the architect, and so neglected by one deciding on a future vocation. The youth may love the work and take pleasure in it, but if imagination, taste, and manual skill are wanting, or even if one of these qualities is absent, the toil of his training is misspent. For this reason, there occur among architects change of profession, misery, and dreary examples of wasted lives. Therefore, the system of attempting to educate a man as an architect, because he might possibly become one, must forever be dropped, unless some authority decides that he is born for it, or has a decided inclination for it.

It is unnecessary to emphasize that peace of soul, freedom from care, inspiration and experience, must be combined, so that the qualities mentioned may all exist in their fulness in the individual. On this will it depend, whether the creative power of the architect will retain its strength or fail during the course of his life. But it must be stated that the wealth of knowledge to be acquired, the experience, the successive production and perfection of fresh and youthful ideas until their embodiment, all postpone the date of the full maturity of the architect far beyond the time when other artists have already attained the climax of their powers. It is not extreme to place the successful practice of the architect after his fortieth year.

To the difficulties resulting from the vocation itself are added others, which make his life still less roseate. The worst and most injurious one is the numerous sham architects and practising vampires. Hence, the architect must utilize every means to reach and maintain that position which justly belongs to him and accords with his powers and knowledge.

The protection of architecture by the State should be discussed here. It is certain that the State enjoys the greatest advantages from the culture of art. Italy is a country where the chief nerves of its life are certainly the art works of past ages, and France likewise owes its prosperity chiefly to art. This protection may occur in various ways. For example, all public buildings should be executed only by real architects. The purchase and use of old or rented buildings for public offices should cease, mere utility should yield to the artistic and practical, and every opportunity for free architectural competitions should be utilized.

Mention should here be made of the City Improvement Fund of Vienna, an institution especially favorable to art and art industries in Austria, in its noble results. This alone made it possible to adorn Vienna by many monumental buildings, which certainly could not otherwise have been built. The means at its disposal for such purposes are exceedingly small, compared to those as-

signed to monumental art in foreign countries. There can be no comparison with Paris, but it is even far inferior to conditions in Berlin, where during nineteen years, from 1871 to 1890, monumental structures costing about $62,500,000 were erected by the government alone.

The architect cannot evade the reproach of having done much to lower his position and profession. The attempt to attain success by dishonest competitions, by neglect of strict requirements, or by a sanguine excess in promises made to his clients has greatly injured the architect. Another cause is the usually inartistic and tasteless manner of executing the drawings for his works. A simple and insipid drawing without any artistic attraction inspires professionals and laymen with anything but interest. Opportunity will occur later for treating this more fully.

Yet the heart of the evil lies more deeply. *The chief reason why the importance of the architect is not fully appreciated lies in the world of forms heretofore employed by him in his expressions addressed to the multitude, and which in most cases remain entirely unintelligible to it.* To explain this point thoroughly is the chief purpose of this work. It is not sufficient to condemn the architecture of the present time, to lose courage in the artistic contest forced on mankind, or to simply yield to the indifference of the masses for architecture, and to throw away our weapons.

Unwearied contributions to the exhibitions, an iron industry, and untiring activity will certainly produce a gradual improvement. Participation in competitions cannot be too strongly urged, since they are exceedingly instructive, in spite of all their defects. Although professional colleagues are usually silent concerning exhibited works, yet every one is aware that artists can only be improved by their works, in whose presence all baseless claims vanish. By his works the artist shows his power, thought, and feeling, his soul and truth, and they are always interesting, if beautiful. All artists are susceptible to such truths; the opportunity for showing them is at exhibitions and competitions.

The title of architect clearly belongs to the artist in architecture alone, and it is improper to create architects of different kinds, such as architect-contractor, architect-constructer, etc. The titles conferred by the State, like State-examined-architect, diplomaed-architect, civil-architect, etc., frequently show as great misuse of the title, as when it is appropriated by persons without shadow of justification therefor.

It is unfortunately everywhere the custom for parents or guardians to decide on the future occupations of children without investigating their individual tendencies. Yet this should never be done, especially in choosing the vocation of architect. The motives influencing the adviser of the youth all concentrate in the short-sighted view that this or the other calling will be most profitable. It is then impossible to judge of the capacity of the young man, since the required qualities of imagination, taste, and clear thinking only appear later, when the choice of occupation has already been made and his fate decided. Early facility in drawing does not of itself stamp the youth as a future architect. In order to act correctly, the best method would be to refer the already scientifically educated candidate at the age of twenty-two to twenty-six years to the K. K. Academy of Formative Arts, whose instructors should have the power to decide whether he might successfully pursue the architectural course. This is easily done by the instructors. There lie before them certificates, drawings, sketch-books. They may permit candidates to take a novitiate year of academic studies, and in case the expected tendency does not appear, they can ascertain the facts without error, or even correct a previous decision. Were this consistently done, it would produce healthier conditions, and would introduce a more natural relation between the number of architectural problems and the number of architects. That an improvement in architecture and in art would result, together with many advantages to the State, the people, and the city, does not require emphasis.

The fact that every architect must also be a constructer has led to a confusion in ideas, yet it is clear that one may be a skilful builder without being able to lay claim to the title of architect. Examinations established by the State are at best only designed to determine whether the candidate appears competent to make the necessary statical calculations, and whether he is able to construct buildings suitable for residence and other purposes; but whether these structures may also be works of art can only be determined by artist architects.

There is now a certain tendency for great architects to attain to authoritative positions as officials, and it must be admitted that so long as these are the best men, just decisions will be made by them. But if such architects no longer exist, the laws remain, and opportunities are opened to men who are not architects. There is something unhealthy in all these conditions, and we must then rejoice that the architects have themselves taken up the work of improvement. The Architects' Club is selected from the Society of Formative Artists in Vienna, and exactly corresponds to an architectural court of judgment. It can only be warmly recommended that officials may recognize its worth and may utilize its assistance in the solution of all important questions. It is desirable that the question of title should be settled in this natural manner.

The earlier life of the architect and the development of his powers have been discussed. But on leaving the school the maturing architect must possess some intellectual qualities, which alone completely fit him for the practice of his profession. As one of the most important, I may mention the ability to clearly perceive the requirements. It is evident that our contemporaries propose the problem and compel the architect to solve it and to invent its form. Numberless things influence this form, all of which must be known to the artistic architect if the form created by him is to be the proper one. Modes of living, customs, fashion, etiquette, climate, location, materials, tools, as well as the means at command, all strongly influence the production of the art-work. To these are daily added numerous novelties and inventions, of which the architect cannot be ignorant, but must quickly and fully inform himself of their value. It is evident that the study of books and journals, practice, traveling, etc., play a principal part in this matter.

A few words are necessary in relation to traveling. After the youthful apprentice to architecture has com-

pleted his studies and leaves the academy as mature, before he commences to practise, a journey of one or two years in Italy usually occurs. I believe this is a mistake. It is certain that much in this step is traditional, and that our modern conditions have essentially changed the point of view. Aside from the fact that the duration of such a journey is now much shorter, modern publications have fully prepared one for everything worth seeing there. This is opposed to the two years' residence in Italy, formerly customary, and which too frequently leads the youthful architect into dissipation. Entirely aside from this, I believe that after three or four years of study at the academy the future architect is not sufficiently mature for a successful tour in Italy, the nursery of ancient art, and therefore that such a journey is always taken to teach shade, well-balanced proportions, arrangement for show, sharply fixed distances of vision, correct perspective contours, the genesis of forms and their motives, characteristic effects in painting and sculpture, etc., can only be appreciated by a skilful and experienced eye. This maturity does not exist at the age of departure from the academy. A tour in Italy for making the commonly quite incorrect drawings of selected buildings can only be regarded as practice in drawing, but to use it in collecting architectural motives that are afterwards to be used on every occasion and at any cost is to be esteemed almost a crime, and certainly a mistake. A very important motive for a journey after completing studies and after the manual labor therein is a certain longing for freedom and for observation, which always arises at that time of life. For this reason I most warmly recommend a brief study tour, which must evidently first be in Italy. But the purpose here indicated is entirely fulfilled in three to five months; after a rest of a month the larger cities may be visited as well as places where luxury is at home, and where one may thoroughly observe and appreciate the requirements of modern mankind. Three months will suffice to fully carry out this plan, and the student will return with impressions received, when he can commence his further work in an office with undiminished love of labor. Years are to be spent there in patiently and industriously learning the practice of the art, so as to pass into independent architectural work at about the end of his thirtieth year. He then has about ten years before his perfect maturity, during which he may produce art works at the cost of others or of himself, which he can scarcely regard with complacency in his later days.

One fact requires mention, and which every architect finds out. This is the constant lagging of ability behind the desire to accomplish. Even ability does not protect the newly fledged architect from this. Thus the architect learns from each new building and is aware of his progress. This perception and the impossibility of improving anything after execution naturally produce a certain artistic depression. A reason for greater confidence in the creating architect is that his experience never diminishes, nor does his love of creating lessen, if it remains healthy, until very late in life. Striking proofs are afforded by the ages of many great architects, which far exceed the usual limit, — Bramante, 70; Sansovino, 93; Michael Angelo, 89; Maderna, 83; Bernini, 91; Jones, 80; Von Klenze, 80; Semper, 76; Garneier, 73, etc.

Before passing to the next topic, a very pertinent question must be answered. Why is not the modern architect likewise a painter and a sculptor like most architects in past ages? The chief reason for this is to be sought in the fact that the knowledge required from the modern architect, and to be acquired by him, has attained such dimensions that it already far exceeds the normal powers of acquisition in man; while the period of study and practice by the apprentice to the art is diminished in accordance with our social conditions. This fact must necessarily produce specialists. But other things are added, and which entirely explain the type of modern architect. Most are mentioned in this work, and reference may here be made to the more prominent. Modern social conditions have permitted the typical art worker to entirely disappear, and have indeed changed each workman into a machine. The natural result must be that this great domain of art is left to the architect. Thus more than ever claimed on all sides, the modern architect is compelled to devote all his time and powers to his limited profession. We might, with equal justice, propose the query, Why are not our modern painters and sculptors also architects? Doubtless for the same reasons that prevent architects from being likewise artists, though with the limitation that the architect is more fully justified by the reasons stated.

So much for the person, period of study, and the existence of the architect. What he is to create will now be discussed. The topics to be examined are style, composition, construction, and practice of the art, although their absolute separation is evidently impossible.

STYLE.

The opinion is unfortunately very common in professional circles, indeed is accepted as an axiom, that the architect must create a basis for each one of his compositions by selecting a so-called style, it even being demanded that he should always show an especial preference for that style tendency whose owner he appears to be.

However repugnant to me to speak on my own account, yet I cannot hesitate to spurn the reproach that I employ the so-called "Empire" style, or utilize it as a basis for further development. The reason for this imputation is to be sought in the frequent use of some characteristic motives of the Empire period in my buildings and designs, such as the projecting horizontal band and the straight line. It is only necessary to refer to the importance of the straight line in our modern buildings. Our perfected construction, machines, tools, and structural methods all require it, while externally plastered construction, long since elevated to be a fully justified art form, directly requires the band and band-like forms. It would be a great error to overlook these facts; opportunities will occur later for clearly presenting my views and freeing myself from this reproach.

The style basis mentioned above is adopted by the opponents of this theory, even in the smallest detail; it becomes a hobby, and is finally made a standard of value in deciding on created art forms. The thoughtful architect is now much perplexed to place the lever for overthrowing such a crazy theory.

It is first to be noted that the word "style" in the sense employed here always denotes the climax of the

period, the apex of its highest elevation. But it is more correct to speak of an art period as not being distinctly limited. Thus it is certain that during the development of their own style, the Greeks were not conscious of its contrast with the Egyptian style, just as little as the Romans were conscious concerning the Grecian. The Roman style was slowly developed from the Grecian, as the latter was from the Egyptian. Hence, from the climax of one style to that of the next there lie before us an unbroken series of transitional forms. The different forms are shaped and evolved by the nations according to their powers, their modes of expression and thought, until they correspond to the ideal of beauty for the period.

Each new style is generally produced from an earlier one by combining new methods of construction, new materials, new human problems and opinions, with the older one, thereby creating new forms.

When events convulse the world and rage through a state, art stops, and when nations have by their might won power, importance, and finally peace, then art has blossomed anew. Great social transformations have always produced new styles. Art and its so-called style are always the fully developed expression of the ideal of beauty for a definite period of time. The artists in all ages had the clearly stated problem of composing new forms from those coming or transmitted to them, which then represented the art forms of their era.

It is indeed to be assumed as demonstrated, that art and artists always represent their period.

It is self-evident that the strongly agitated latter half of the nineteenth century also seeks an expression corresponding to a view of art original with itself. But events progress more rapidly than any development of art. Therefore, what is more natural than to seek art in haste, to atone for neglect, to look for happiness everywhere, and to believe that it may be found; hence, so many artists have cried "Eureka," and have sought and found men inspired by their views. The impetuosity of all style tendencies in recent decades was the result of this tendency. Who does not recall the electric effect produced by the words "Old German" style after the great political events in Germany?

If in a quiet and unprejudiced way we now consider the clamor about styles and the philippics of the last fifty years, by which the art views of the world were to be guided into true paths, we can only regard the mistakes of those apostles of style with compassionate smiles. After the earlier art mists had blown away, the result was found to be without motive and unsuitable; it became clear that all so-called styles were once fully justified, but that a different expression must be sought for our modern period. Even if such styles caused temporary satisfaction, because the results usually recalled good old models, this artistic debauch cannot continue, since such art works appear to be merely the fruits of archæological studies, and all creative value is almost entirely wanting in them.

But the problem of art, even of modern art, has always remained the same in all periods. Modern art must yield for us modern ideas, forms created by us, which represent our abilities, our acts, and our preferences.

Whether Durer, Michael Angelo, Rubens, or Fischer von Erlach created a building, an allegory, a statue, or a portrait, such an art work always bore the original stamp of the master and the period, and it never occurred to such artists to base their works on a definite style, nor to copy the modes of expression current in previous centuries. But we too frequently find, in opposition to what is here said, an endeavor by modern artists to reproduce old ideas with the greatest accuracy, and even to imitate the changes produced by weather upon ancient monuments still remaining. This cannot possibly be the problem of modern art, and it certainly shows an absence of all artistic feeling, that nothing disturbing is found in the use of such "art forms" in the modern world.

A few style pictures will serve to further illustrate what has been said. A Grecian temple, painted in bright colors, with a grove adorned by vari-colored statues, a handsome, high-girt Greek with brown skin, the sacred olive tree in its harmonious coloring, the deep blue sky, the atmosphere tremulous with the heat, the sharply outlined shadows, — this is indeed a picture, a symphony. A Gothic church, the solemn gleam of candles softly shining through colored windows, the multitude gently flowing toward the church in their dully, party-colored, slashed doublets and smock frocks, the incense, the pealing of bells, the organ tones, beneath a frequently very gloomy sky, — this is again a picture. The French kings, from Louis XIII. to Louis XVI., the court ladies and courtiers in their rich and heavy clothing and perukes, their etiquette, their richly scrolled halls, at last becoming more simple, the shepherd plays in their artificial gardens, far removed from the depressed people, — again a series of pictures If the attempt were made to take from these pictures only the smallest portion, and to replace this with another bit in another style, this would become a discord in the harmony. If the picture is to become harmonious for us, then must art and its unchanging forms keep in close touch with man, his appearance, and his endeavors.

The style pictures just mentioned lead us logically to perceive the intricate and heretofore ignored connection of taste, fashion, and style. Even a slight gift for observation must produce the conviction that the external appearance, the clothing of men in its form, color, and appointments, entirely expresses contemporary art views and art creations, and indeed nothing else could be conceived. No period and no style is an exception to this. These facts become clearly evident by comparing pictures of costumes with contemporary works of architecture, or still more so by an examination of paintings representing both together. (Carpaccio, Callot, Bosse, Lepautre, Chodowiecki, Canaletto.) This subject may be pursued so far, that the conviction is finally forced on us, that the great masters in past ages failed when they attempted to represent figures in the costumes of their ancestors. Their views and their perceptions always corresponded to the forms of their own epoch alone. The creations of pencil and brush were always the original style of their own time. Why entirely otherwise to-day? A collected medley of styles, everything copied and even applied superficially, and this is expected to harmonize with our surroundings! It is not necessary to be an artist to reject this result. Where is the error? Why this discord between fashion and art? Modern mankind has certainly not lost taste, but now more than ever

before notices the least error in fashion, which is increasingly more critical than formerly. Our clothing and our fashions are dictated by general consent, are properly determined, and thus exclude all errors. Discord is not to be sought therein, but must consequently exist in the works of current art, and this is indeed the case.

Objects resulting from modern views (it is evident that this can only apply to such as have become art forms) *harmonize perfectly with our surroundings, but copied and imitated objects never do.*

For example, a man in modern traveling costume accords very well with railway waiting rooms, with sleeping cars and carriages, but how would it appear to see persons in the costumes of the era of Louis XV. making use of them? The very delicate feeling of the public concerning fashion and this indifference or even stupidity in reference to artistic works are based on the following principle. Fashion is nearest, most popular, most easily influenced, and is the precursor of the style, while the developed style itself represents a crystallized, less easily affected and more refined taste, whose criticism demands depth. But the most potent reason why people usually are so thoroughly indifferent to works of art is that the language of art is unintelligible to them, and the objects produced are not works of our period.

Our era has wandered far in seeking and groping for truth, in expressing our views, and has sought safety in monkey-like imitations rather than in new creations and in a natural development. It has pleased artists to dissect the dead with microscope and knife rather than to lay hand on the pulse of the living and to alleviate their pains.

The assumption that many architectural problems, such as churches, appear to be the same now that they were centuries since, while other problems are of the most recent origin, has produced great errors. Hence laymen, and unfortunately many architects, are of the opinion, for example, that a parliament house may be Greek, but a telegraph or telephone building may not be Gothic, while they directly require a church to be in that style. They all forget a single fact, that men entering these buildings are all modern, and that it is not the custom to ride with naked legs to parliament in an antique triumphal chariot, nor to go in a slashed doublet to church or to the city hall. All such errors are eventually charged to the architect. In extenuation there may only be pleaded the haste required and a search for the true method.

A striving after "picturesque effect "and for harmony with existing structures have produced similar peculiar results. In a very recent competition for a city hall, the architects, the professional and non-professional judges, all honestly tried to bring the proposed structure into harmony with the ancient "picturesque" surroundings, proceeding as in the decoration of theaters, never understanding that the erection of the new city hall would cause the rebuilding of all adjoining edifices, so that finally an "ancient" city hall would be surrounded by modern buildings. In another competition for a city hall, some fifty-two out of fifty-three designs were executed in Gothic or Old German. Yet the author has found that the controlling factors in such cases are anything but Gothic or Old German men, being rather plump, self-conscious, modern Germans, and he aimed to express these peculiarities in his treatment of the city hall.

Artistic attempts to join imitations to existing edifices without taking account of other conditions, with a certain poverty of spirit and lack of independence, must always produce an effect like that of a man in the costume of a past century, hired from a dealer in costumes, who attends a modern ball. Hence, this cannot possibly be the true path for modern architecture to follow, even were all creative power denied to it.

All modern creations must correspond to the new materials, to the requirements of the present time, if they are to suit modern mankind; they must manifest our own better, democratic, self-conscious, ideal nature, and must take into account the colossal technical and scientific acquisitions, as well as the thoroughly practical tendency of mankind; this is even self-evident!

What colossal labor there remains to modern art, and how zealously must we lay hold of it, to show the world that we have become equal to the problem set before us! If we enter the true path, the innate perception of mankind's ideal of beauty will naturally be more strongly evident, architectural expression will become intelligible, and a style representing our epoch will be created. Nay more! We find ourselves in the midst of this movement. This general departure from the broad road of imitation and habit, this ideal striving for truth in art, press forward with gigantic force, overthrowing everything opposing their definite and victorious course. As always heretofore, art will have the power to hold up their own ideal before the eyes of mankind.

But the revolution will be so powerful, that we may scarce speak of a revival of the Renaissance. A completely new birth, a creation, will result from this movement, and unlike earlier masters with few traditional motives and intercourse with some neighboring nations at command, but in consequence of our social conditions and by the power of modern acquisitions, we shall have all the abilities and all the knowledge of mankind at our free disposal. This new style will be the "modern," representing us and our epoch, plainly derived from new conceptions in art, which must clearly express the almost total disappearance of romanticism and the generally dominating prominence of reason in all our acts.

This future style, representing us and our era, and built up on the basis here indicated, requires time for its development, like all preceding styles. But our rapidly living century likewise here endeavors to reach this end more quickly than was the case earlier; therefore will the world attain success more quickly and to its own surprise.

Such views require that one should never speak of the choice of a style as the basis of modern architectural creation, but the architect must strive to produce new forms, or those forms that most readily harmonize with our modern construction and requirements, thus best expressing truth. The architect may search in the full treasury of traditional forms, but he may not copy those selected, but rather adapt them to his purpose in new forms. If this process can be but gradual, it is indeed evident that it requires for this end the suggestions and aid of our contemporaries.

(*To be continued.*)

Selected Miscellany.

NOTES FROM ST. LOUIS.

The reports of the Building Commissioner show for the past four months an increase in value of building permits of more than one and one half million dollars over that for a corresponding time last year, and both architects and builders are busy.

A recent decision of the Supreme Court, sustaining the city in its power to issue special tax bills against property for street improvements, has opened the way for the making of streets, and the Board of Public Improvements is losing no time in availing itself of it.

The corner-stone of the building for the Mary Institute of the Washington University group was recently laid. The building will cost $200,000. Work on the other buildings is progressing rapidly, some of them being now under roof.

Baker & Knell have been selected, through competition, as the architects for the hospital and dormitories of the State Federal Soldier's Home at St. James, Mo.

The contract has been awarded for a thirteen-story fireproof office building for the northeast corner of Seventh and Market Streets, which will replace the historic Masonic Temple built during the early '60's. The building will cost $600,000. W. Albert Swasey is the architect. Mr. Swasey has also a fine residence for Dr. J. J. Lawrence on the corner of 89th Street and Fifth Avenue, New York City.

The new Centenary Hospital, adjoining the Barnes Medical College on the north side of Chestnut Street, will be six stories, and cost $85,000. J. B. Legg is the architect.

Architects Mauran, Russell & Garden have been selected as the architects of the Garth Memorial Library at Hannibal, Mo. They have also designed an interesting half-timbered house for Westminster Place, and an English Gothic residence for Forest Park Terrace.

CARTOUCHE, HORACE TRUMBAUER, ARCHITECT.
Conkling-Armstrong Terra-Cotta Company, makers.

WAYLAND LIBRARY, WAYLAND, MASS.
Roofed with Celadon Tile.
Cabot, Everett & Mead, Architects.

Architect Will Levy is building the Jewish Hospital on Delmar Avenue, west of Union Avenue. The pavilion plan has been adopted, and the buildings will be fireproof.

The Metropolitan Life Insurance Company is building new offices on the corner of Grand Avenue and Palm Street. Messrs. Le Brun & Son of New York, the architects, have employed the Dutch Renaissance, using red brick with red tile roof.

Frank A. P. Burford has resigned as chief assistant to Commissioner of School Buildings Wm. B. Ittner, to accept the secretaryship of the Jean Johnston Construction Company, and George F. A. Breuggeman, formerly with Mauran, Russell & Garden, succeeds to the position.

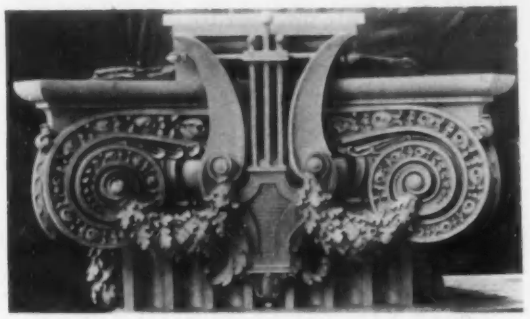
NOTES FROM PITTSBURGH.

The reports so far this year from the building inspector's office show that this is the best year that Pittsburgh has ever known, both in number and importance of new

DETAIL BY C. I. BERG, ARCHITECT.
New York Architectural Terra-Cotta Company, makers.

DETAIL OF PEDIMENT.
Executed in gray terra-cotta by the New Jersey Terra-Cotta Company.

buildings, and if the reports of only a few of the many new buildings announced in the papers during the month are true, the remainder is likely to prove even better.



CAPITAL, A. H. BOWDITCH, ARCHITECT.
Atlantic Terra-Cotta Company, makers.

H. C. Frick, who is building the twenty-story office building at Fifth Avenue and Grant Street, is reported to be negotiating for the purchase of the property on the opposite corner of Fifth Avenue, now occupied by St. Paul's Roman Catholic Cathedral. The congregation has voted to sell and to build a new building in the East End. If this goes through, one of our most interesting brick buildings will be torn down, but it will likely be the ending of all opposition to the removal of "the hump" on Fifth Avenue.

Alden & Harlow are preparing plans for a fifteen-story building at the corner of Fourth Avenue and Wood Street, and for an eight-story building to be built in the East End. They have also prepared plans for a large residence to be built on Forbes Street, cost about $100,000.

DETAIL BY NIMMINS & FELLOWS, ARCHITECTS.
Northwestern Terra-Cotta Company, makers.

McClure & Spahr are the architects of a fifteen-story building for the Keystone Bank.

D. H. Burnham, of Chicago, is reported to be preparing plans for a $1,000,000 office building to be built here.

NEW PUBLICATION.

House and Garden, the first number of which we have received, is a magazine devoted to architecture, gardens, and decoration. It comes to us from Philadelphia in a very attractive and presentable form, and shows through all its numerous illustrations the recognizable evidences of the appreciative, refined taste of the trio of Philadelphia architects in whose hands it has been placed, Messrs. Wilson Eyre, Jr., Frank Miles Day, and Herbert C. Wise. There is a large possibility for publications of this kind, and we are glad to welcome it, and commend it to all our architectural readers.

DETAIL EXECUTED BY THE ST. LOUIS TERRA-COTTA COMPANY.

SUNDRY ITEMS.

John A. Davidson, architect, whose office for the past five years has been at 828 Flatbush Avenue, Brooklyn, has removed to the Continental Building, 46 Cedar Street, New York.

BALUSTRADING FOR COLLEGE OF MUSIC, CINCINNATI, OHIO.
Indianapolis Terra-Cotta Company, makers.
Gustave W. Drach, Architect.

The Roxbury Courthouse, illustrated in our May number, was designed by J. Laurence Berry and Francis R. Allen, associate architects, and not Allen & Vance as stated.

The Inter Ocean Building, Chicago, illustrated in the

DETAIL BY F. S. NEWMAN, ARCHITECT.
Standard Terra-Cotta Works, makers.

half-tone plate form of this number, is of white enameled terra-cotta, some touches of gold being burned in on the ornamental work. The fluted columns, 24 ft. high, are made in three pieces, which is quite a problem in a shrinking, warping material, when it is considered that these same fluted columns are in reality nothing but bundles of straight lines. The two large groups of statuary above the double columns are finished in dull white enamel, and the central figure of "Progress," at the entrance, is in dull green enamel, as also is the semi-circle of columns at the entrance and the domed framework above, holding the glass panels. The work was executed by the American Terra-Cotta and Ceramic Company.

"PROGRESS." FIGURE AT ENTRANCE OF INTER OCEAN BUILDING, CHICAGO.
American Terra-Cotta and Ceramic Company, makers.

Akron Star Brand Cement is being used in the erection of a new church at Avon, Ohio, and for a large beet sugar factory at West Bay City, Mich.

The Perth Amboy Terra-Cotta Company have secured contracts to furnish the terra-cotta for the following buildings: Arrott Building, Pittsburgh, Pa., F. J. Osterling, architect; building for the People's Land Company, Pittsburgh, Pa., Alden & Harlow, architects; residence for R. W. Patterson, Dupont Circle, Washington, D. C., McKim, Mead & White, architects; hotel for the Toronto Hotel Company, Toronto, Can., Henry Ives Cobb, architect.

Shawnee brick, made by the Ohio Mining and Manufacturing Company, have been used in the following new buildings: Apartment, 21st Street, New York City, Thorne & Wilson, architects; offices and warehouse, Broad Street, New York City, R. S. Townsend, architect; apartments, 85th Street, New York City, Hill & Turner, architects; residence, Fifth Avenue, New York City, Renwick, Aspinwall & Owen, architects; ware-

DETAIL BY CHARLES B. MEYERS, ARCHITECT.
White Brick and Terra-Cotta Company, makers.

CAPITAL EXECUTED BY THE WINKLE TERRA-COTTA COMPANY.

rooms, Mercer Street, New York City, Robert Mynicke, architect.

Fiske & Co., Boston, will furnish brick for the following new buildings: National Food Conservatory, Niagara Falls, N. Y., Earle & Fisher, architects. (This building takes upwards of 800,000 face brick.) Parish House, Park Congregational Church, Norwich, Conn., Earle & Fisher, architects; Y. M. C. A. Building, New Haven, Conn., Brown & Van Beren, architects; Y. M. C. A. Building, Hyde Park, Mass., Thos. Rowe, architect; Masonic Building, Lewiston, Me., Coombs & Gibbs, archi-

TERRA-COTTA FIGURE FOR ORPHEUM THEATRE, BROOKLYN.
B. Kreischer & Sons, makers.
Frank Freeman, Architect.

"TEMPLE BAR" BUILDING, BROOKLYN, N. Y.
Architectural terra-cotta furnished by the Excelsior Terra-Cotta Company. Brick furnished by Sayre & Fisher Company.
George L. Morse, Architect.

tects; Town Hall, Warren, Mass., Dwight & Chandler, architects; Y. M. C. A. Building, Fall River, Mass., Nat. C. Smith, architect; Franklin Bank Building, Pawtucket, R. I., Wright & Isham, architects; Lowell Textile School, Lowell, Mass., Lockwood & Greene, architects; Bowdoin College. Library, Brunswick, Me., Henry Vaughn, architect; Knights of Pythias Building, Somerville, Mass., J. W. Cobb, architect.

THE Year Book of the Department of Architecture of the Massachusetts Institute of Technology is in a suggestive way a good epitome of the work which is done at this most excellent school. The distinction between practical problems and school projets is becoming less every year, and though we fancy that Mr. Myers' Study for a Department Store, which appears in the Year Book, would hardly suit all the requirements of Jordan-Marsh, or Wanamaker, it is quite probable that these commercial houses may grow up to something of that sort some of these days, and in the meantime, the training the students obtain from the study of these purely academic problems is beyond question.

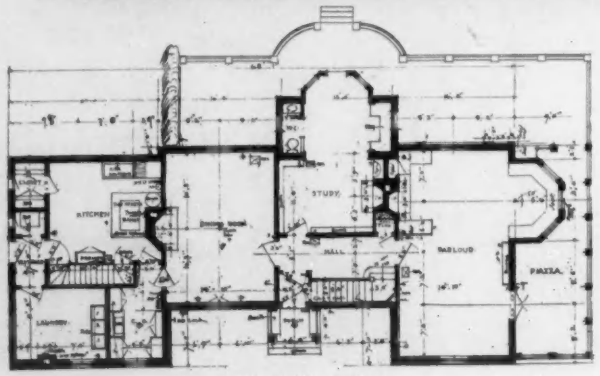
The Hand-book of the Department of Architecture of Cornell University is in a similar way a very excellent presentation of the students' work. We notice particularly a design for a reception room in a State Capitol, by Mr. Tissington, as a most careful study of a very elaborate problem.

SOME striking facts concerning the question of housing the poor in Liverpool have recently been collected by the League for Social Service. At various times the Municipal Corporation of Liverpool has obtained powers from Parliament to borrow sums amounting to $2,000,000 for the demolition and improvement of property found to be unsanitary. This large amount has already been expended with the exception of about $35,000. The Medical Board of Liverpool now reports that many houses are in an unsanitary condition, unfit for habitation, and they recommend an immediate appropriation to carry on the work of destroying this property, and then improving it with new homes. The number of houses which have already been demolished by the Municipal Council of Liverpool as unfit for habitation is 6,500. The City of Liverpool has now in the course of erection 182 houses, with recreation grounds for the poor, and since January 1, the city has appropriated $150,000 to be used in erecting 95 additional houses for the poor.

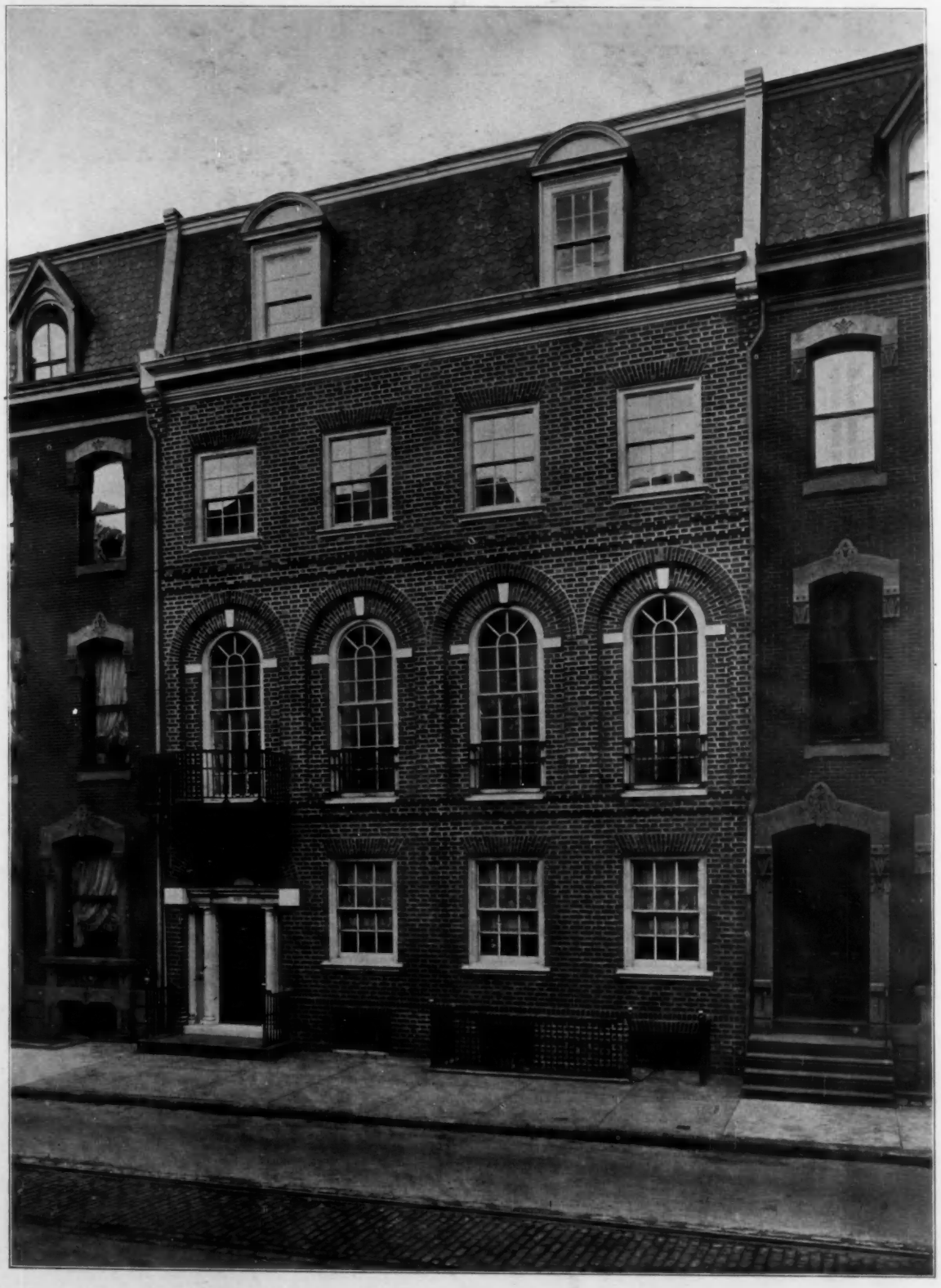
HOUSE FOR W. H. ANDERSON, CINCINNATI, OHIO.
Elzner & Anderson, Architects.

A MASTER'S HOUSE AT GROTON SCHOOL, GROTON, MASS.

R. CLIPSTON STURGIS ARCHITECT.

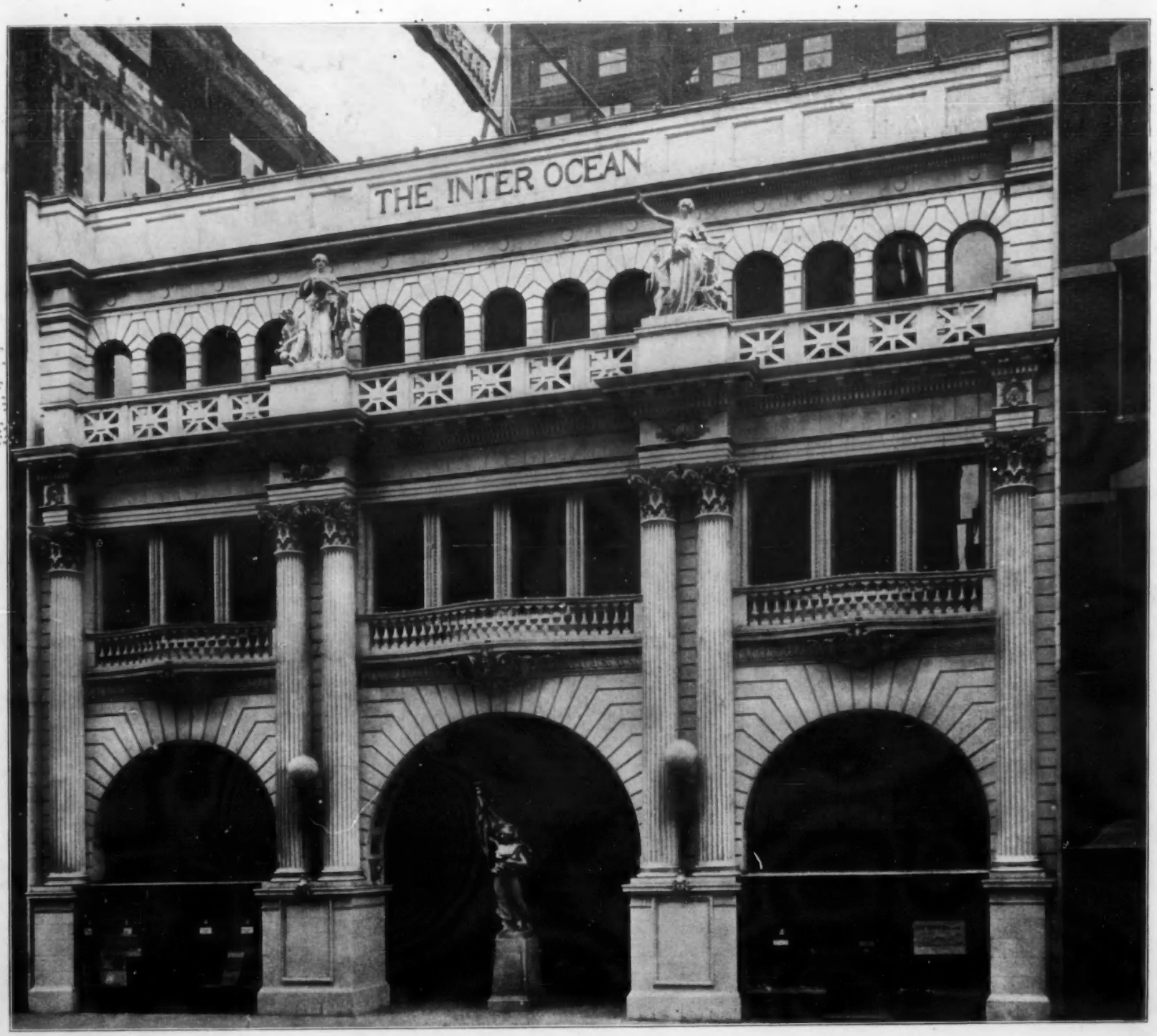


FIRST FLOOR PLAN.



RESIDENCE, SPRUCE STREET, PHILADELPHIA.

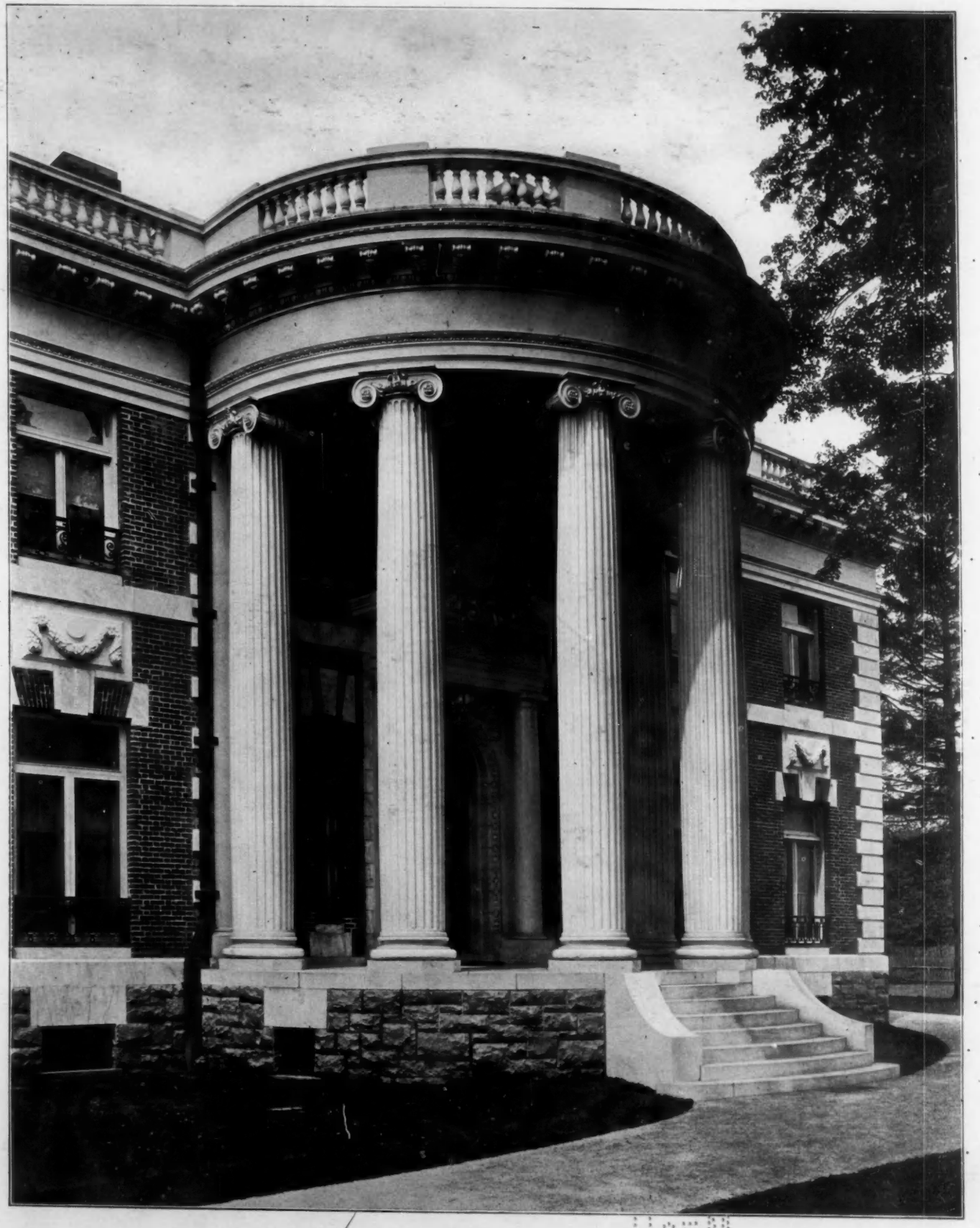
WILSON EYRE, JR., ARCHITECT.



THE INTER OCEAN BUILDING, CHICAGO, ILL.

(ENTIRE FRONT OF WHITE ENAMELED TERRA-COTTA.)

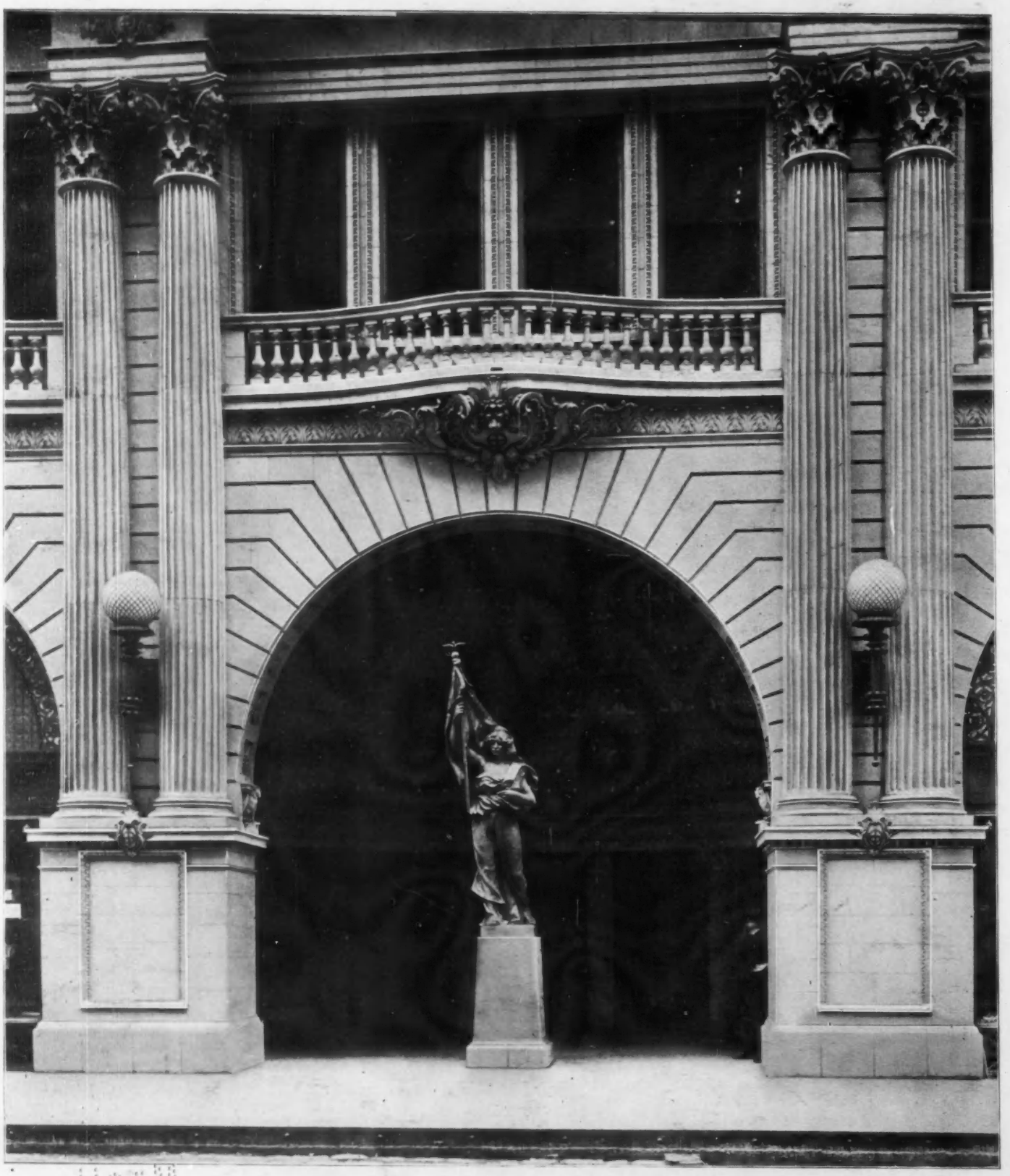
W. CARBYS ZIMMERMAN, ARCHITECT.



FRONT ENTRANCE.

HOUSE AT ELIZABETH, N. J.

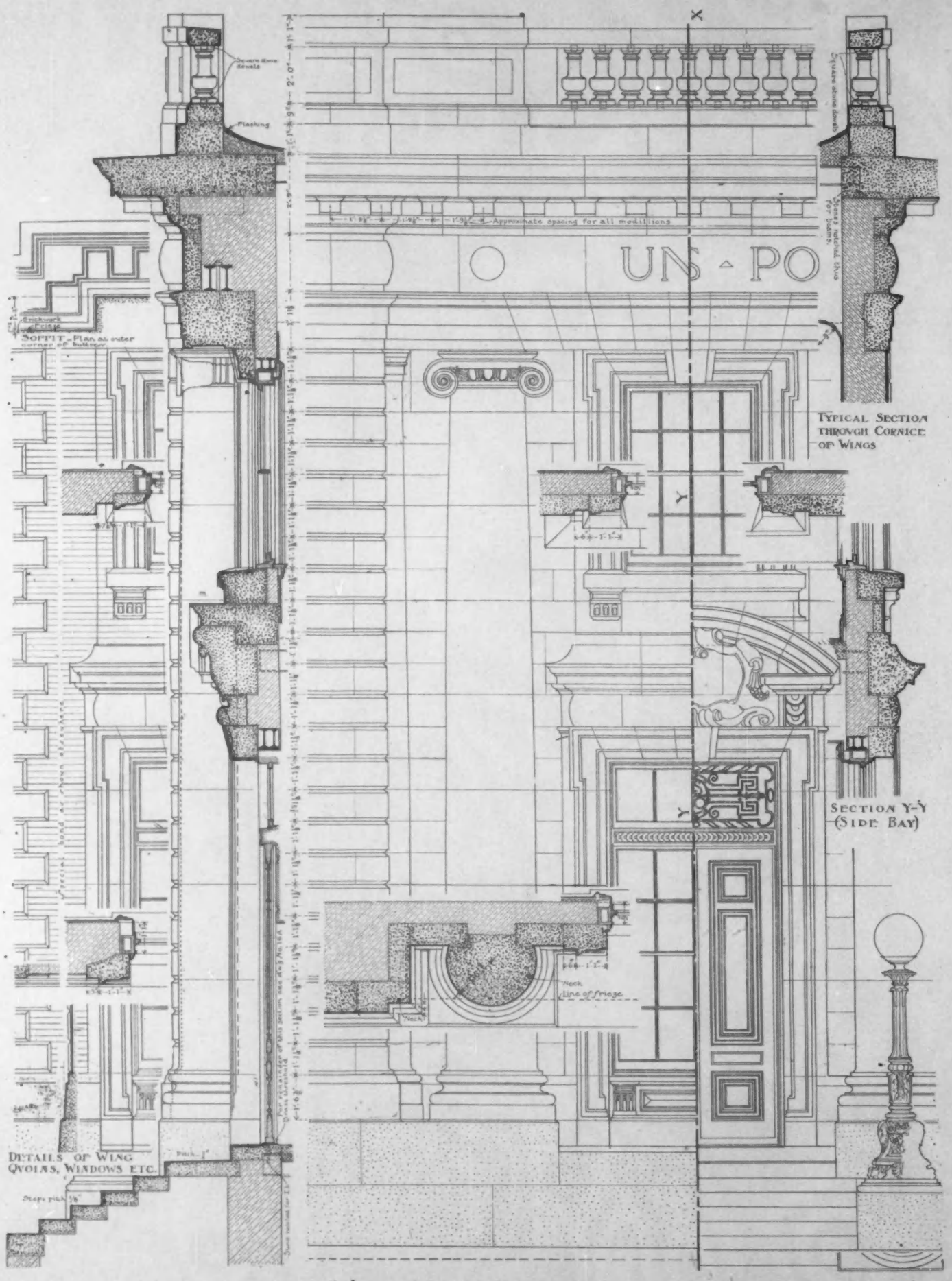
CARRERE & HASTINGS, ARCHITECTS.



ENTRANCE TO THE INTER OCEAN BUILDING, CHICAGO, ILL.
W. CARBYS ZIMMERMAN, ARCHITECT.

HOUSE AT ELIZABETH, N. J.

CARRERE & HASTINGS, ARCHITECTS.



TYPICAL SECTION THROUGH CORNICE OF WINGS

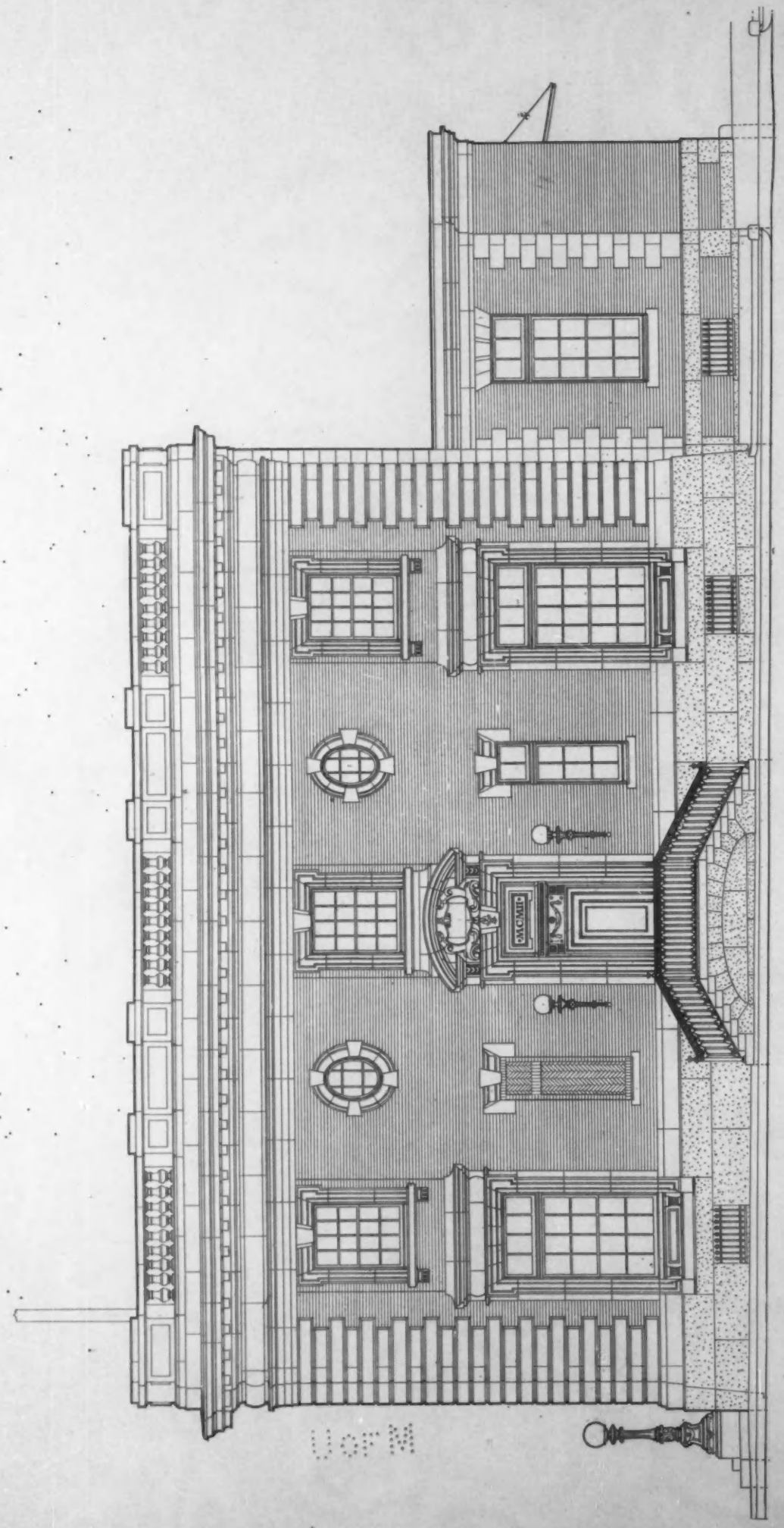
SECTION Y-Y (SIDE BAY)

DETAILS OF WING QUOINS, WINDOWS ETC.

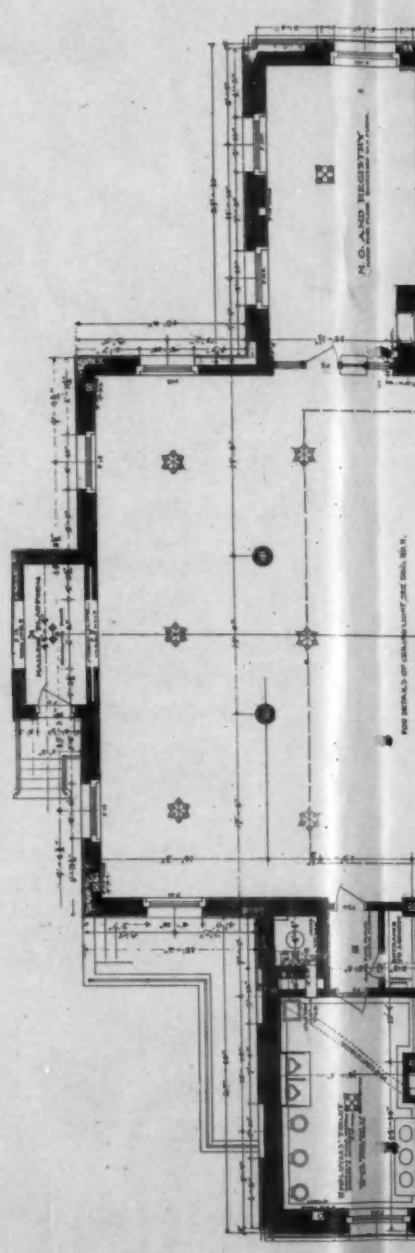
EXTERIOR DETAIL.

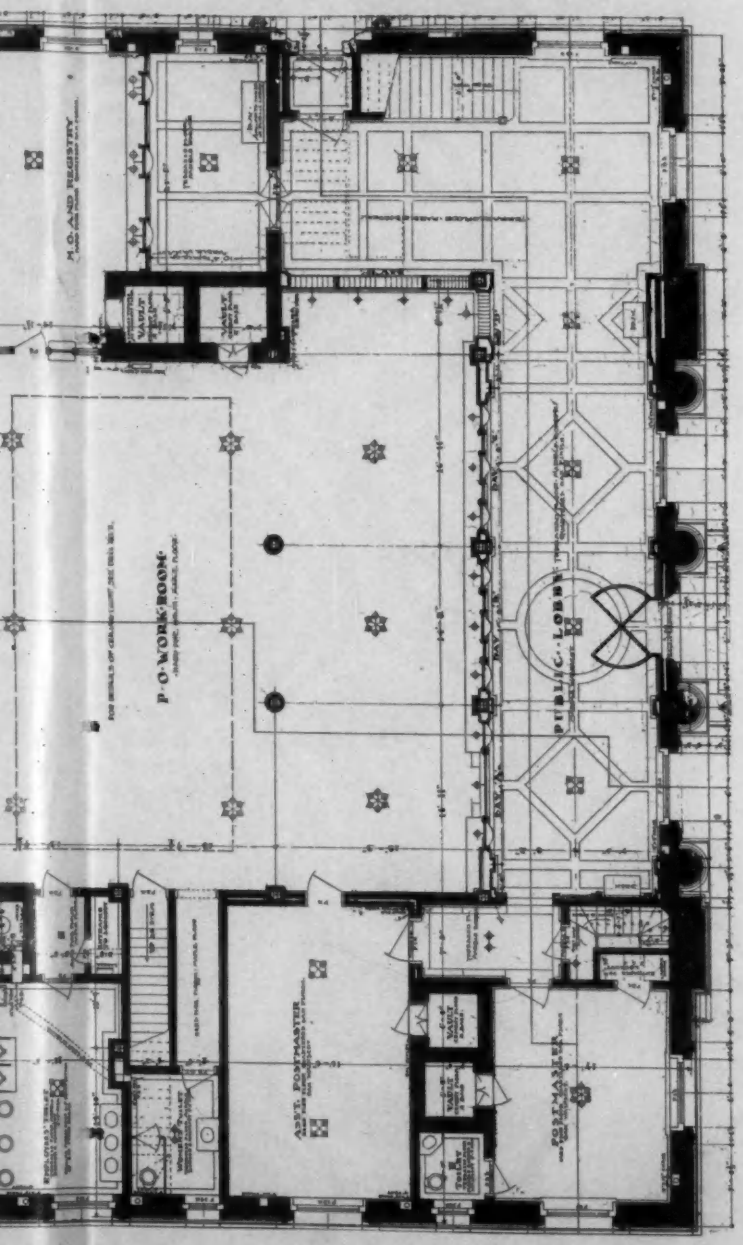
UNITED STATES POST OFFICE, JOLIET, ILL.

JAMES KNOX TAYLOR, SUPERVISING ARCHITECT, TREASURY DEPARTMENT.

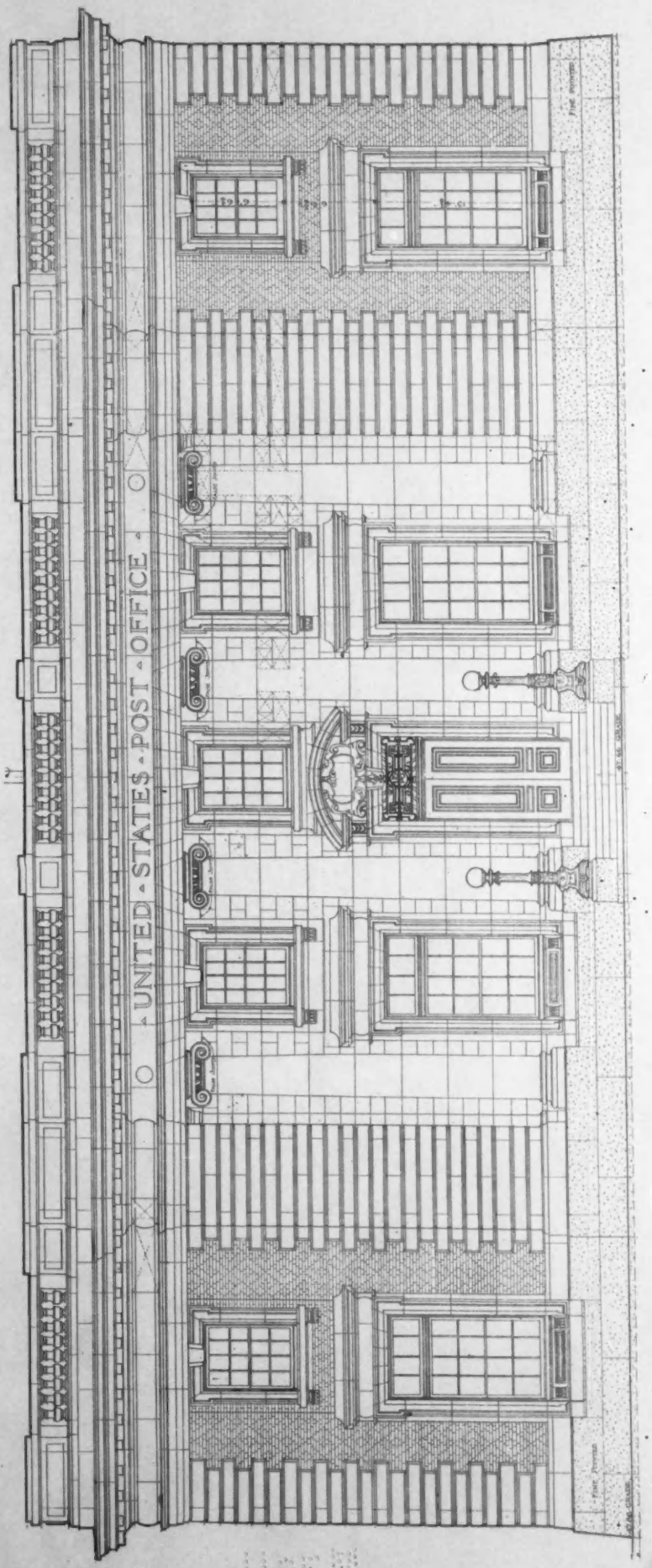


SIDE ELEVATION.





PLAN.



FRONT ELEVATION.

UNITED STATES POST OFFICE, JOLIET, ILL.

JAMES KNOX TAYLOR, SUPERVISING ARCHITECT, TREASURY DEPARTMENT.

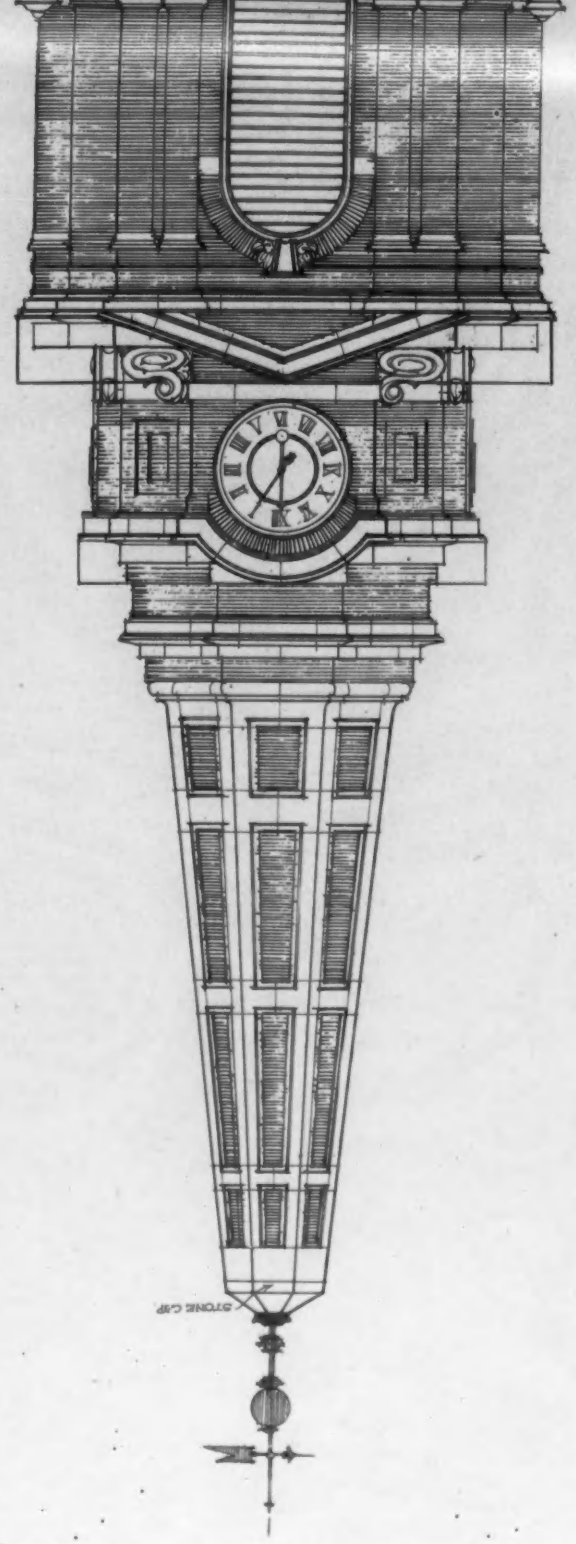
TRANSVERSE SECTION.

PLAN.

LONGITUDINAL SECTION

THE CONGREGATIONAL CHURCH, NAUGATUCK, CONN.

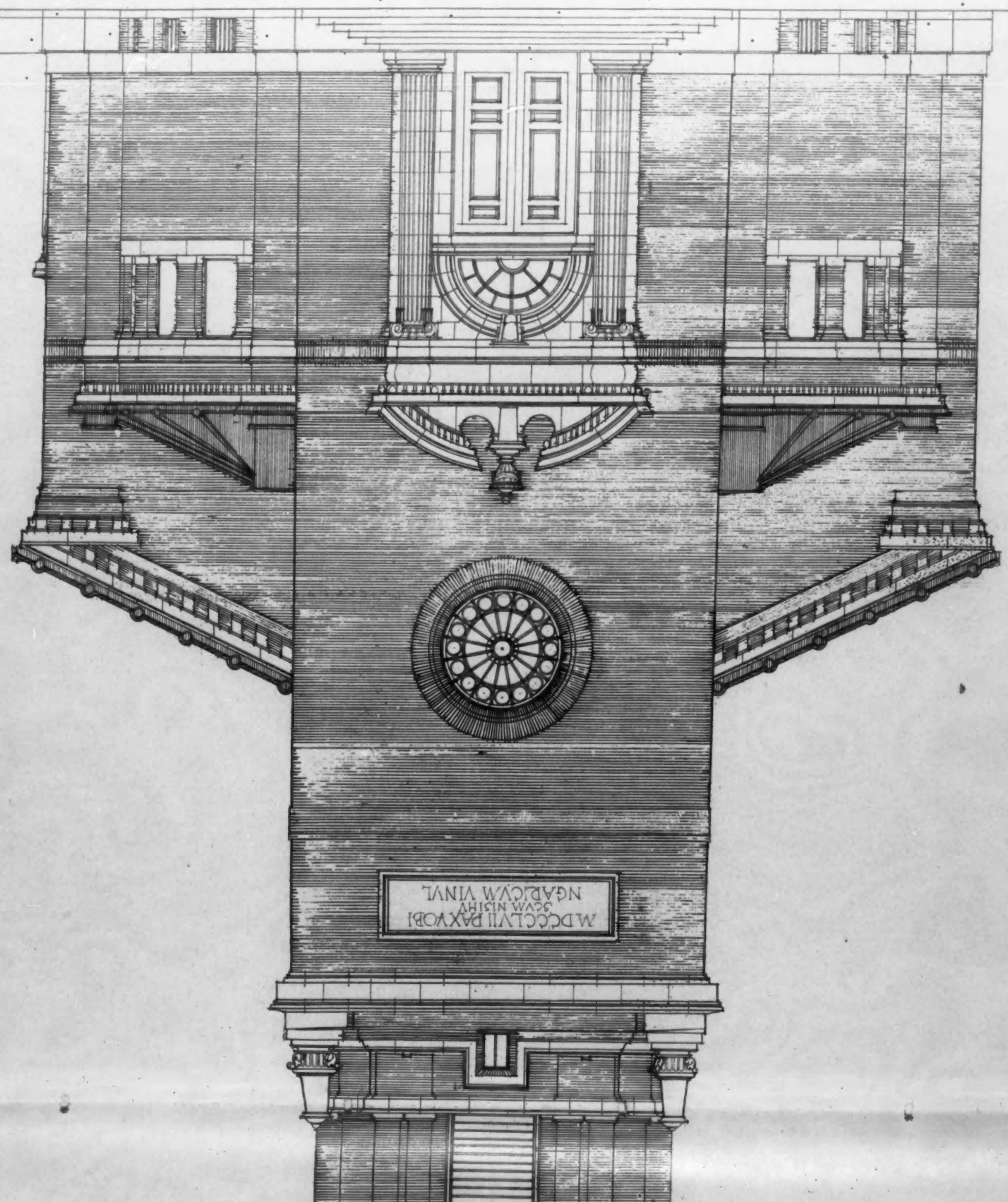
McKIM, MEAD & WHITE, ARCHITECTS.

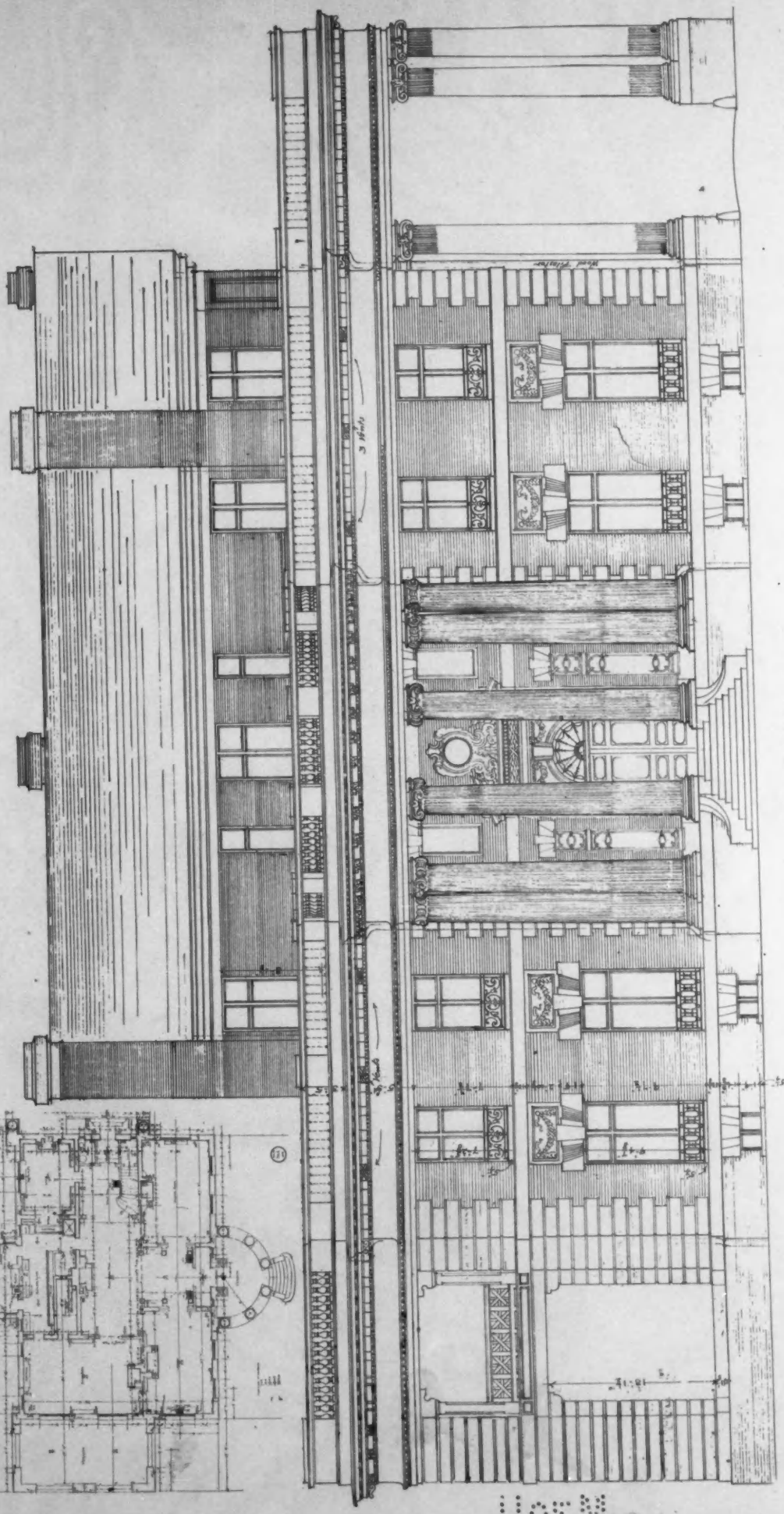

STONE CAP

FRONT ELEVATION.

THE CONGREGATIONAL CHURCH, NAUGATUCK, CONN.

NICKIM, MEAD & WHITE, ARCHITECTS.





FRONT ELEVATION.

HOUSE AT ELIZABETH, N. J.

CARRERE & HASTINGS, ARCHITECTS.